



# IEP Legislative Update Week of February 10, 2014

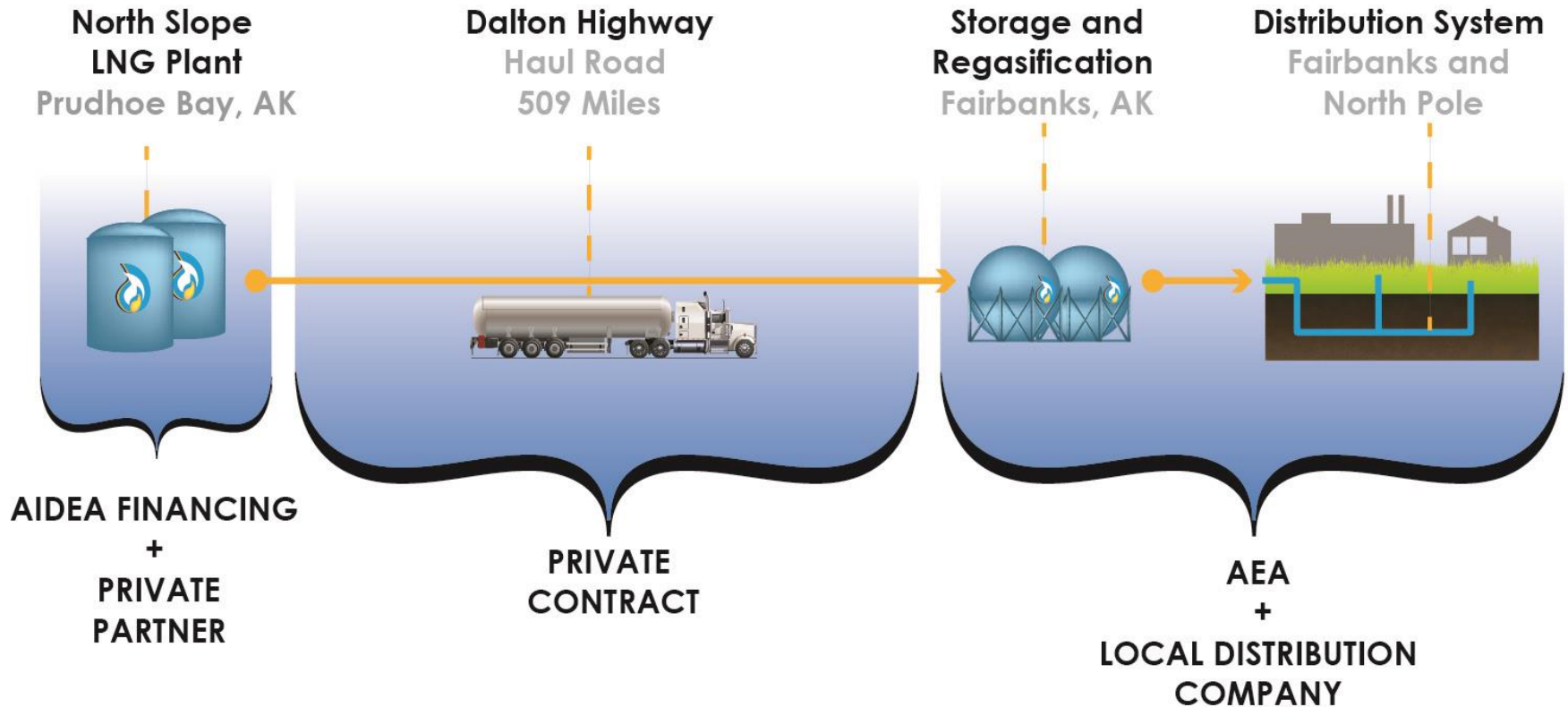
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## Interior Energy Project Bringing North Slope Natural Gas to Alaskans

# AGENDA

- **IEP Goals, Financing and Project Overview**
- **Project Location**
- **Project Milestones**
- **Schedule & Permitting**
- **Gas Distribution and Demand**

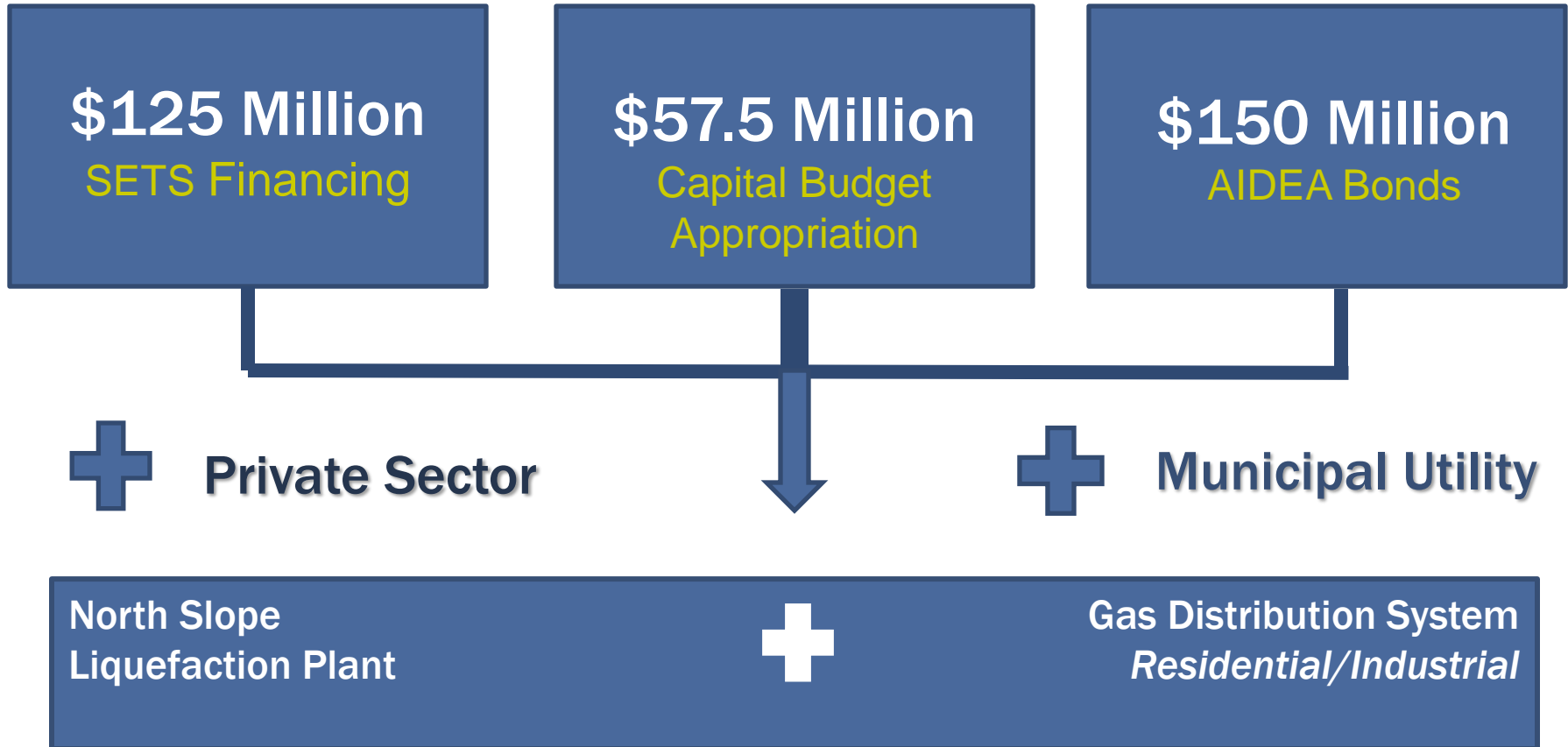
# IEP PROJECT OVERVIEW



# IEP GOALS

- **Supply natural gas to Interior Alaska:**
  1. **At the lowest cost possible**
  2. **As many Alaska customers as possible**
  3. **As soon as possible**
- **Provide propane from the gas stream**
- **IEP investments compliment alternative sources of gas supply**
- **Use private-sector mechanisms**

# SB23 FINANCE PACKAGE



# LNG AND PROPANE SALE PRIORITIES

1. Residential and commercial space heating
2. Electric utilities
3. Industrial customers
4. Other utilities
5. Open market LNG sales



# COMPLETED PROJECT MILESTONES



## North Slope Facility

- ✓ **Project Pre-Feasibility Analysis**
- ✓ **North Slope Plant Plan of Development**
- ✓ **Private Partner Due Diligence and Negotiations**
- ✓ **Pad Build and Design Procurement**
- ✓ **Long-lead Equipment Procurement**

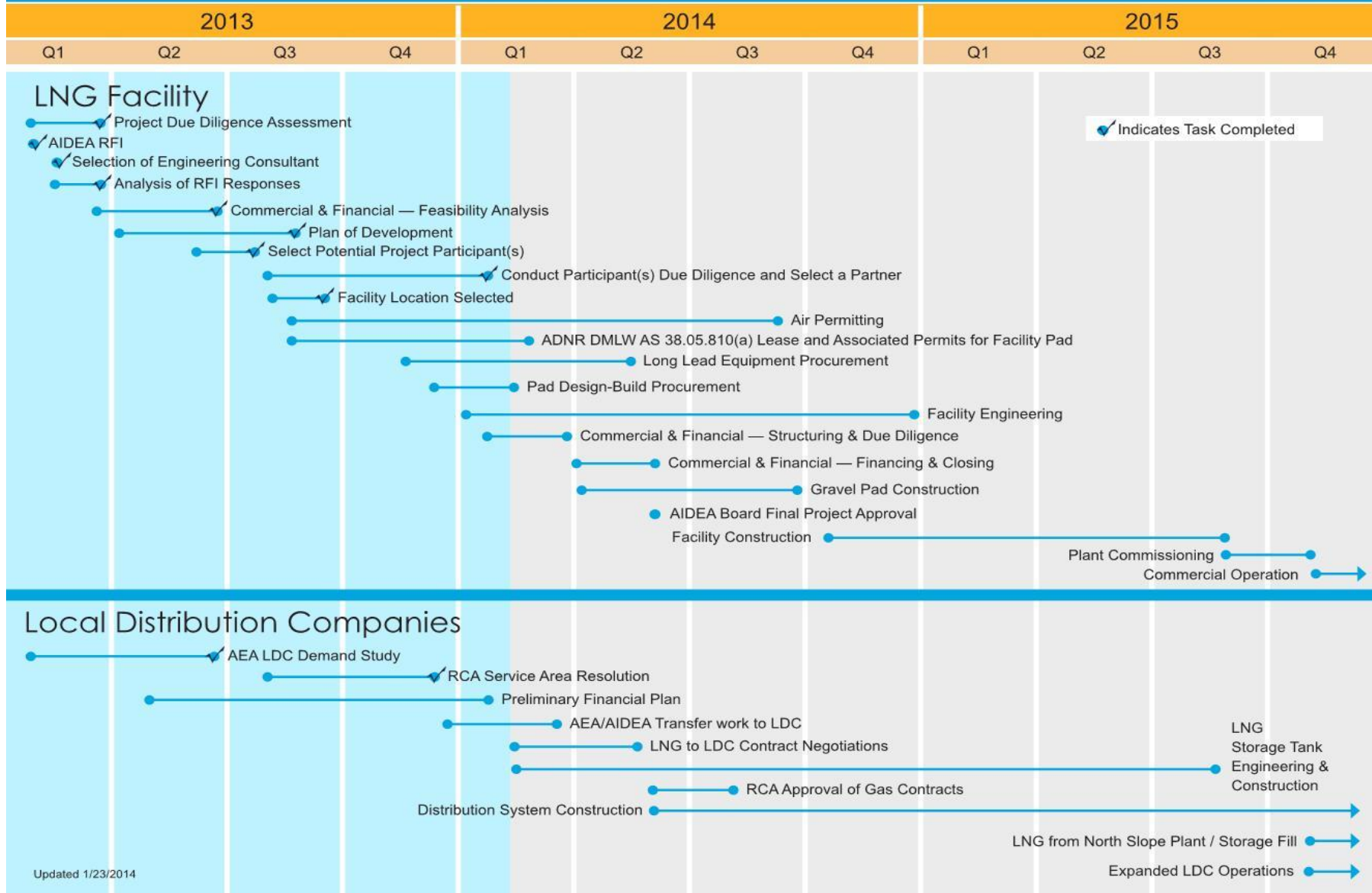
## Distribution System

- ✓ **Demand and Conversion Analysis**
- ✓ **RCA Service Area Resolution**
- ✓ **Distribution Cost Project Estimate**
- ✓ **FNG Storage Tank Financing (5.25MM gallon tank)**

**Estimated 6-year Build-Out**

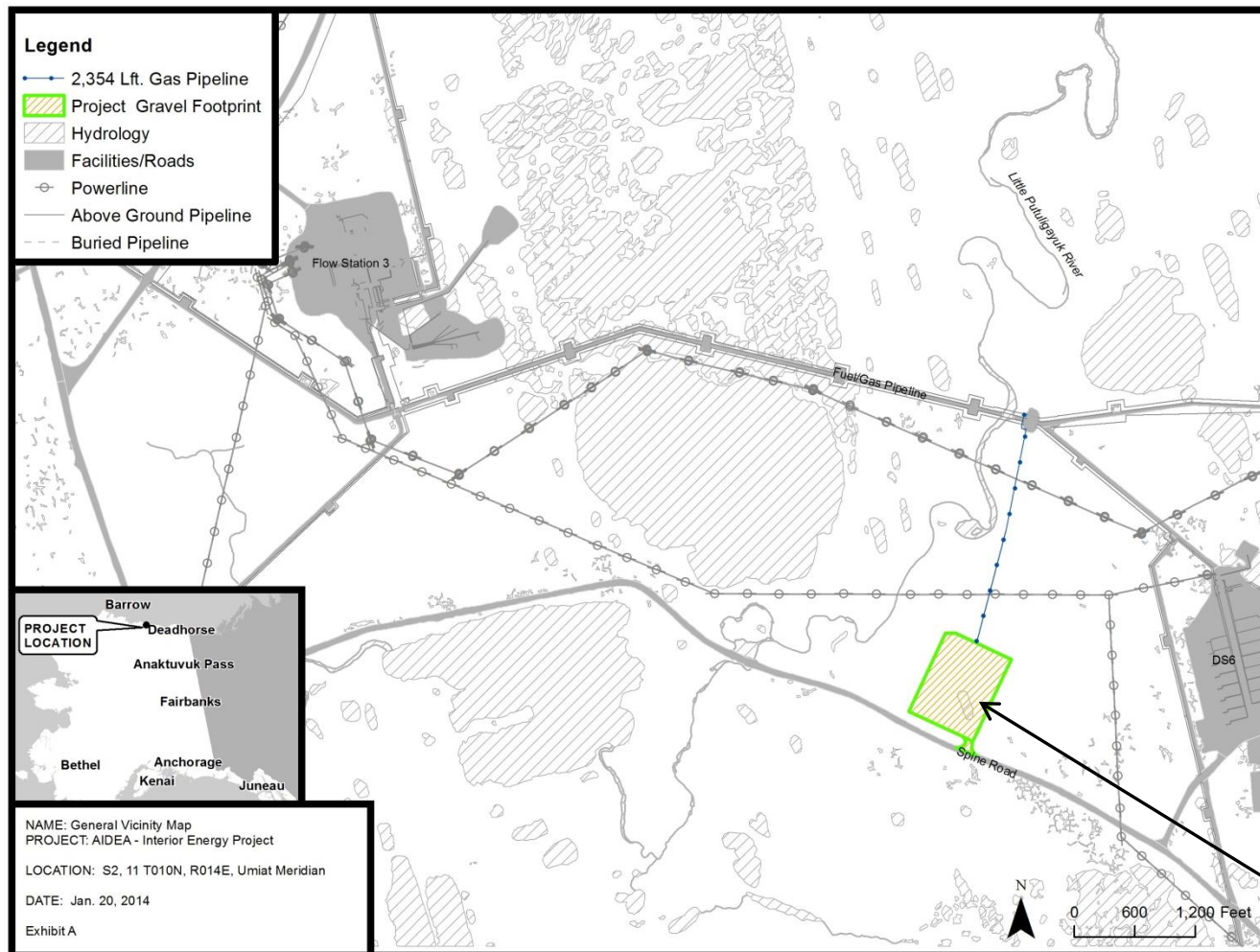


# AIDEA Interior Energy Project - Schedule





# PROPOSED PROJECT LOCATION: LNG PLANT



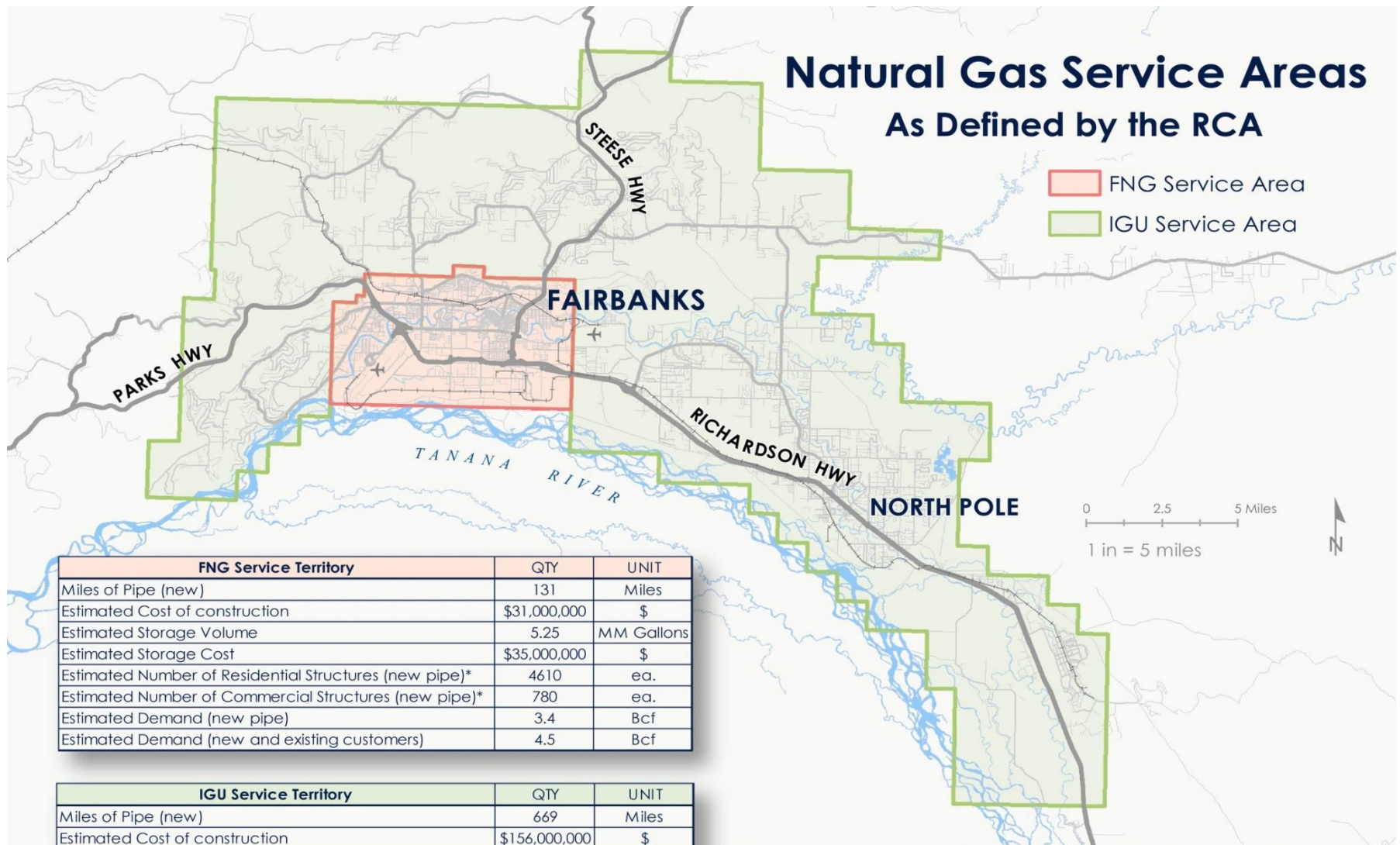
**Proposed  
Project  
Location**

# NORTH SLOPE FACILITY NEXT STEPS



- **Letter of Intent - executed week of February 3, 2014**
  - Establishes the basic parameters of the North Slope LNG Plant financing between AIDEA and MWH
- **Project Development Agreement - March 2014**
  - Negotiate and finalize a detailed Project Development Agreement with MWH (Commercial Structure)
  - Secure LNG purchase agreements with potential customers – IGU, FNG and GVEA

# Natural Gas Service Areas As Defined by the RCA



| FNG Service Territory                                  | QTY          | UNIT       |
|--|--------------|------------|
| Miles of Pipe (new)                                    | 131          | Miles      |
| Estimated Cost of construction                         | \$31,000,000 | \$         |
| Estimated Storage Volume                               | 5.25         | MM Gallons |
| Estimated Storage Cost                                 | \$35,000,000 | \$         |
| Estimated Number of Residential Structures (new pipe)* | 4610         | ea.        |
| Estimated Number of Commercial Structures (new pipe)*  | 780          | ea.        |
| Estimated Demand (new pipe)                            | 3.4          | Bcf        |
| Estimated Demand (new and existing customers)          | 4.5          | Bcf        |

| IGU Service Territory                                  | QTY           | UNIT       |
|--|---------------|------------|
| Miles of Pipe (new)                                    | 669           | Miles      |
| Estimated Cost of construction                         | \$156,000,000 | \$         |
| Estimated Storage Volume                               | 7.25          | MM Gallons |
| Estimated Storage Cost**                               | \$46,000,000  | \$         |
| Estimated Number of Residential Structures (new pipe)* | 11240         | ea.        |
| Estimated Number of Commercial Structures (new pipe)*  | 420           | ea.        |
| Estimated Demand (new pipe)                            | 3             | Bcf        |

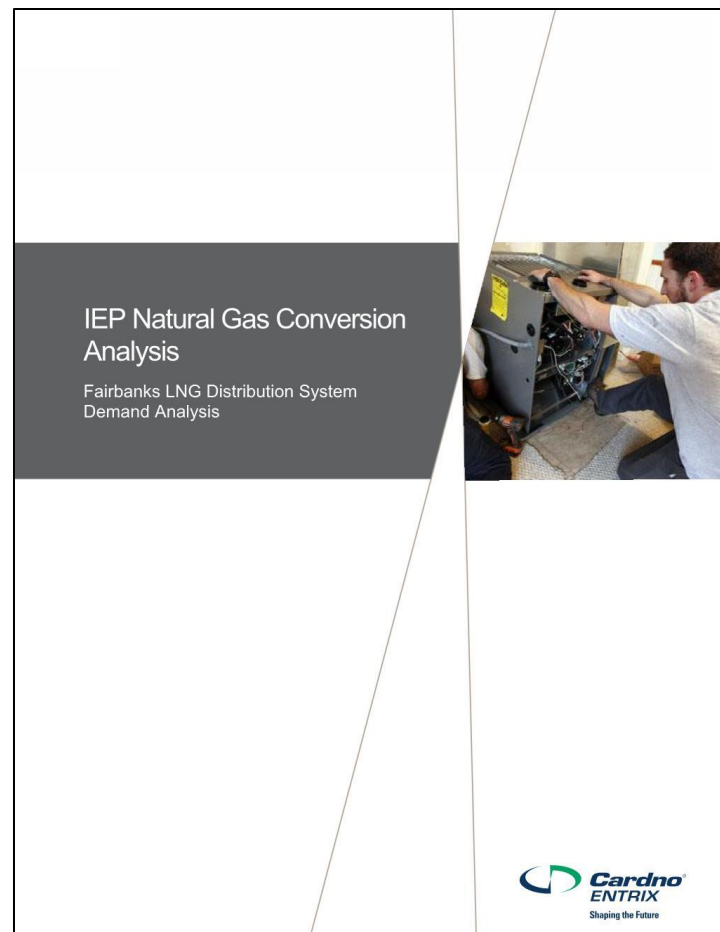
\* Structure count are those "willing to convert" based on Cardno Report Tables 5.9 and 5.10

\*\* Prorated 5.25MM gallon tank (assume \$5M is associated facilities)

ASSUMPTION: Phase I (from Tables) is entirely FNG

# CONVERSION ANALYSIS STUDY

- **LNG Distribution System Demand Analysis**
- **Report complete January 2014**
- **Demographics, economics, and conversion rate forecasts**
- **Full report posted to IEP website**



# NORTH SLOPE PLANT DEMAND BY YEAR (GAS DISTRIBUTION ONLY)



From Table 5.10, pg 5-19  
Cardno Report  
Natural Gas Demand by  
Service Territory (Bcf)

Existing Customers  
Newly Served Customers  
**Total**

**FNG Territory**

| 2015       | 2016       | 2017       | 2018       | 2019       | 2020       | 2021       | 2022       | 2023       | 2024       | 2025       | 2026       | 2027       |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 1.1        | 1.1        | 1.1        | 1.1        | 1.1        | 1.1        | 1.1        | 1.1        | 1.1        | 1.1        | 1.1        | 1.1        | 1.1        |
| 0.5        | 2.3        | 2.8        | 3.3        | 3.3        | 3.3        | 3.4        | 3.4        | 3.4        | 3.4        | 3.4        | 3.4        | 3.4        |
| <b>1.6</b> | <b>3.4</b> | <b>3.9</b> | <b>4.4</b> | <b>4.4</b> | <b>4.4</b> | <b>4.5</b> | <b>4.5</b> | <b>4.5</b> | <b>4.5</b> | <b>4.5</b> | <b>4.5</b> | <b>4.5</b> |

**IGU Territory**

| 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0.0  | 0.1  | 0.6  | 1.2  | 1.8  | 2.3  | 2.6  | 2.8  | 2.9  | 2.9  | 2.9  | 3.0  | 3.0  |

# NORTH SLOPE PLANT DEMAND BY YEAR

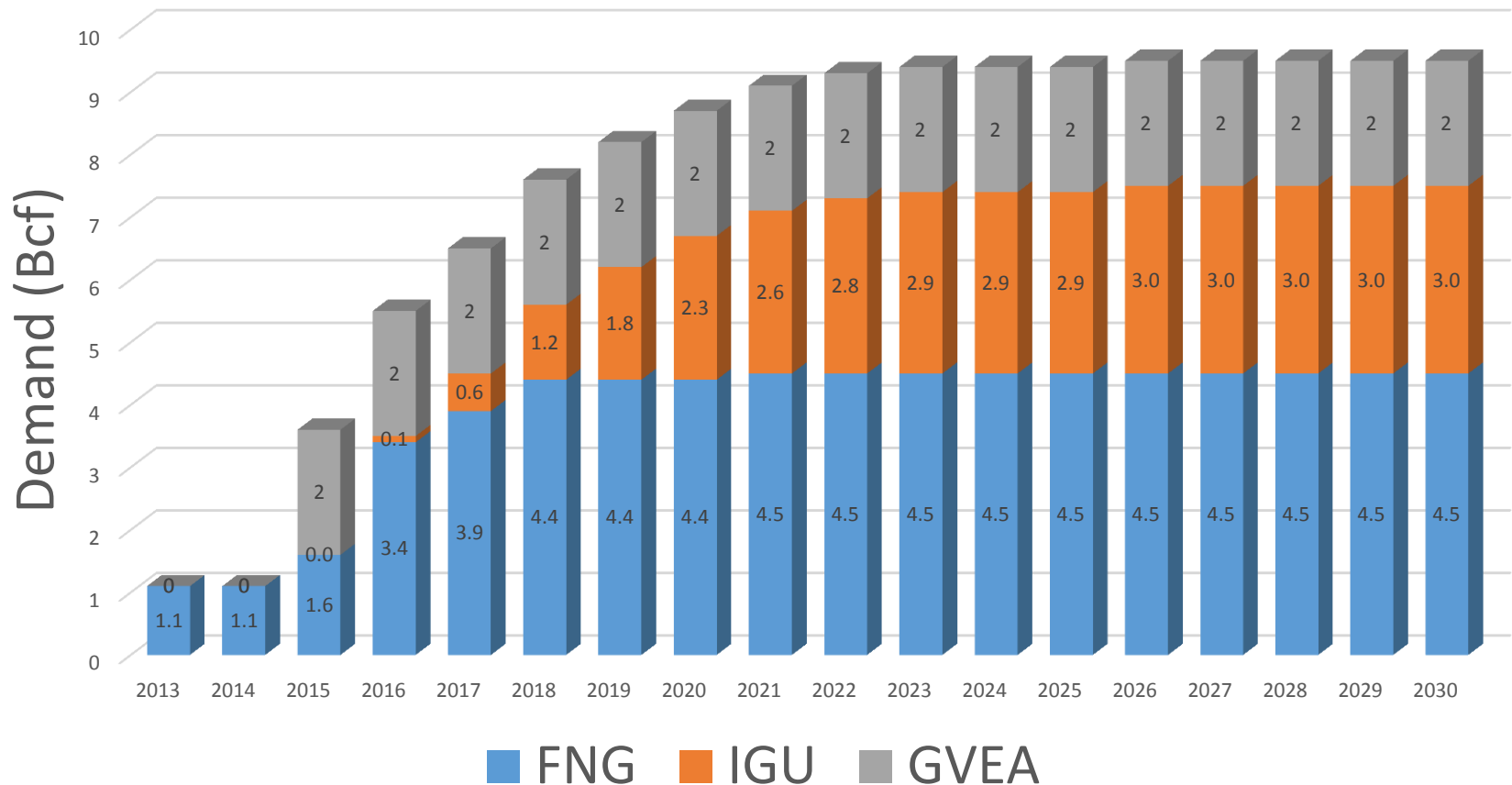
## (ADJUST FOR PEAK DAY)



|  | 2016        | 2017        | 2018        | 2019        | 2020         | 2021         | 2022         | 2023         | 2024         | 2025         | 2026         | 2027         |
|--|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Plant Demand by Year:                    | 3.50        | 4.50        | 5.60        | 6.20        | 6.70         | 7.10         | 7.30         | 7.40         | 7.40         | 7.40         | 7.50         | 7.50         |
| <i>Simplified Capacity Factor of 1.5</i> | <b>5.25</b> | <b>6.75</b> | <b>8.40</b> | <b>9.30</b> | <b>10.05</b> | <b>10.65</b> | <b>10.95</b> | <b>11.10</b> | <b>11.10</b> | <b>11.10</b> | <b>11.25</b> | <b>11.25</b> |

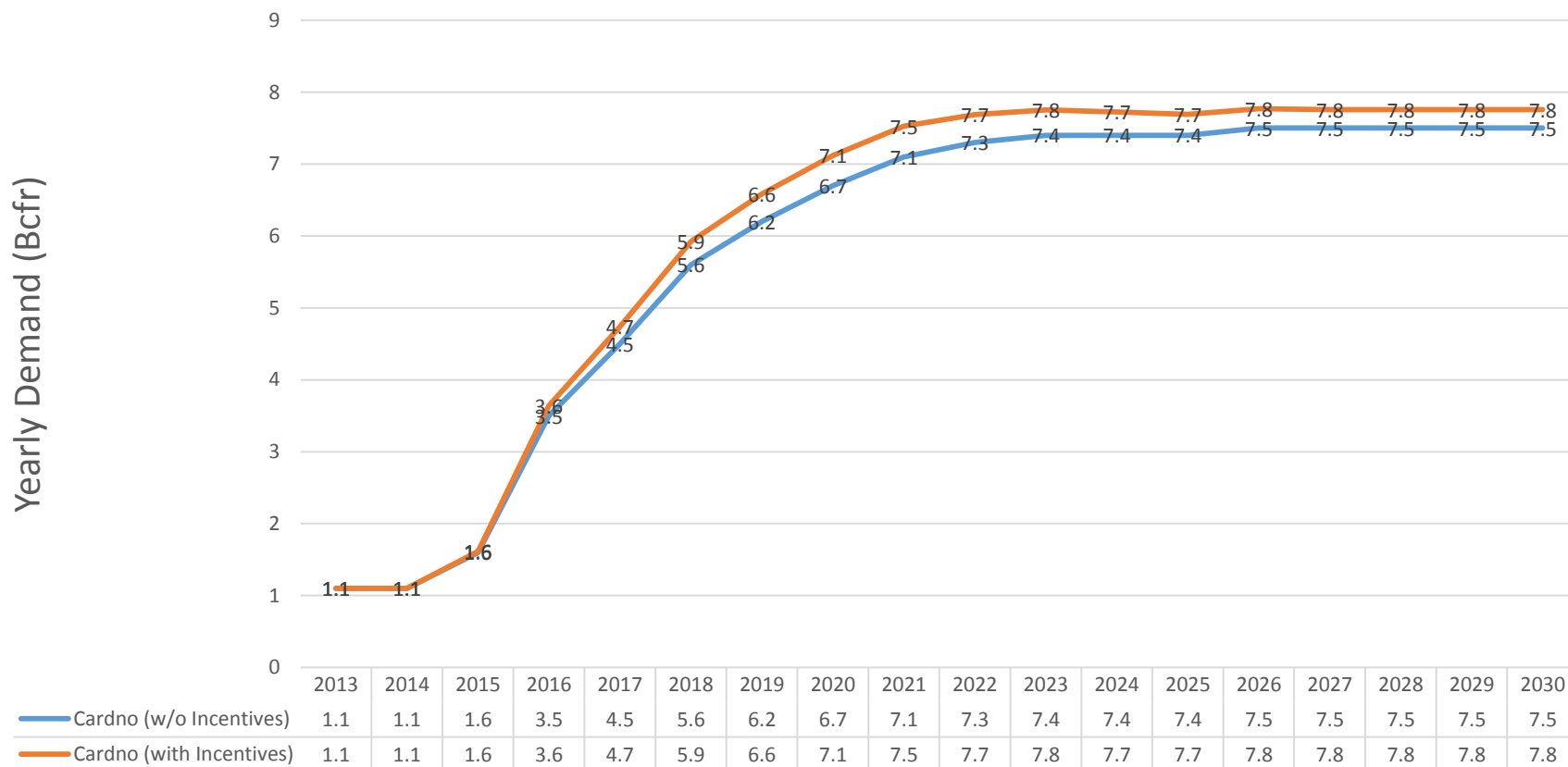


# PIPELINE GAS DEMAND BY CUSTOMER



# INCENTIVE DEMAND COMPARISON

DEMAND COMPARISON (without Industrials)



# DISTRIBUTION SYSTEM NEXT STEPS

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- **Utility discussions on distribution financing access**
- **Negotiate Take or Pay Contracts**
- **RCA Approval of Contracts**



# QUESTIONS

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[www.interiorenergyproject.com](http://www.interiorenergyproject.com)