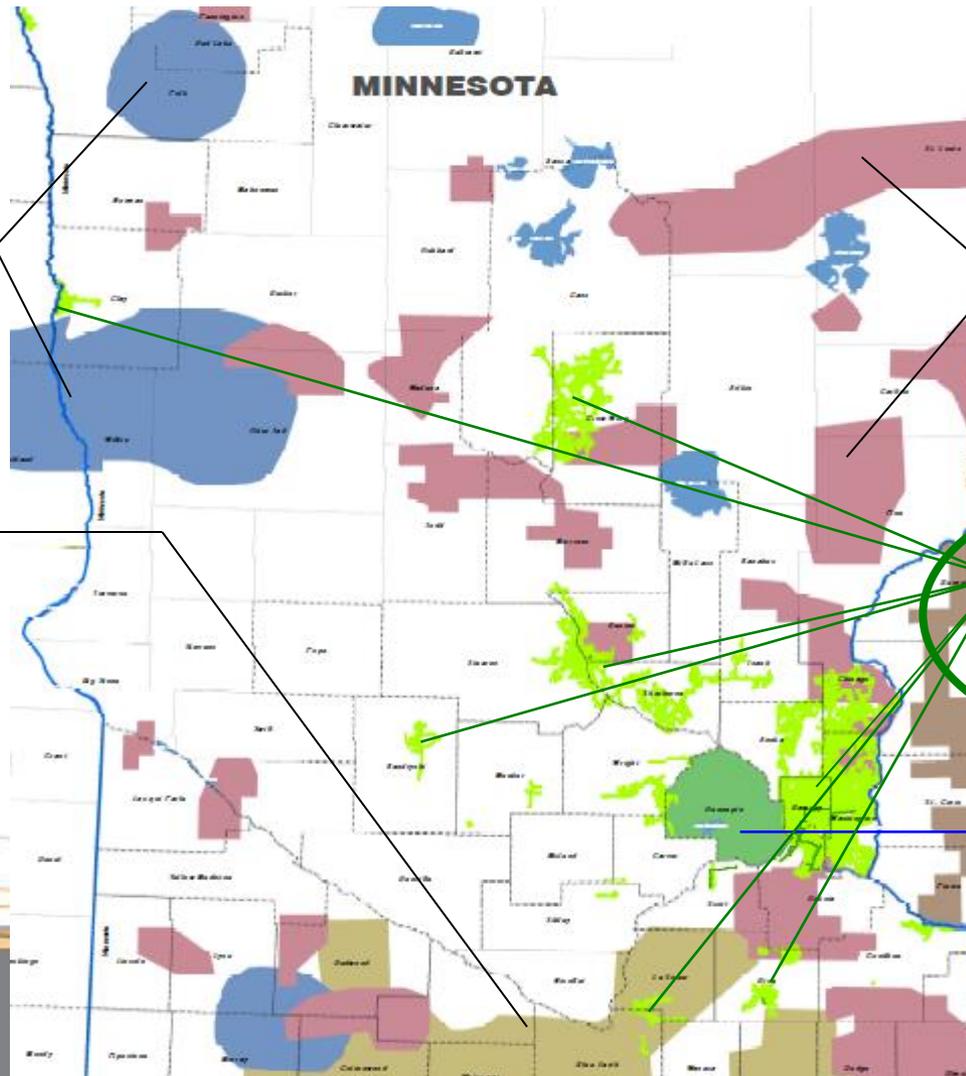




## Gas Expansion Analysis

# Minnesota Natural Gas Providers:

- Green area represents where NSPM currently has gas distribution



MDU Resources	
<b>Retail Customers:</b>	<b>20,847</b>
Retail Revenue (\$000s)	\$ 29,730
Revenue per Customer	\$ 1,426

Minnesota Energy Resources	
<b>Retail Customers:</b>	<b>41,054</b>
Retail Revenue (\$000s)	\$ 54,924
Revenue per Customer	\$ 1,338

Interstate Power & Light	
<b>Retail Customers:</b>	<b>10,651</b>
Retail Revenue (\$000s)	\$ 12,962
Revenue per Customer	\$ 1,217

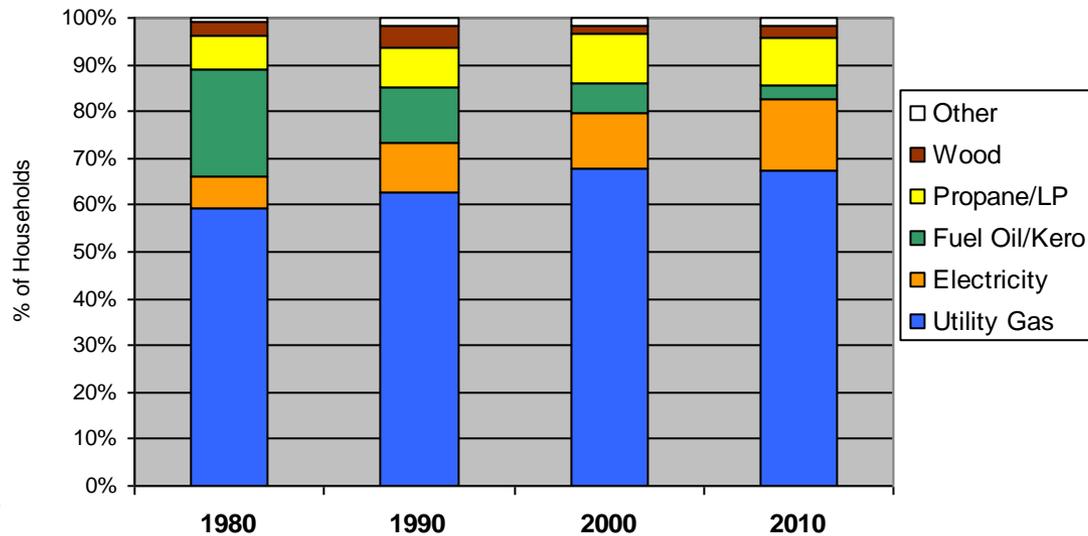
Northern States Power - MN/ND	
<b>Retail Customers:</b>	<b>479,408</b>
Retail Revenue (\$000s)	\$ 582,738
Revenue per Customer	\$ 1,216

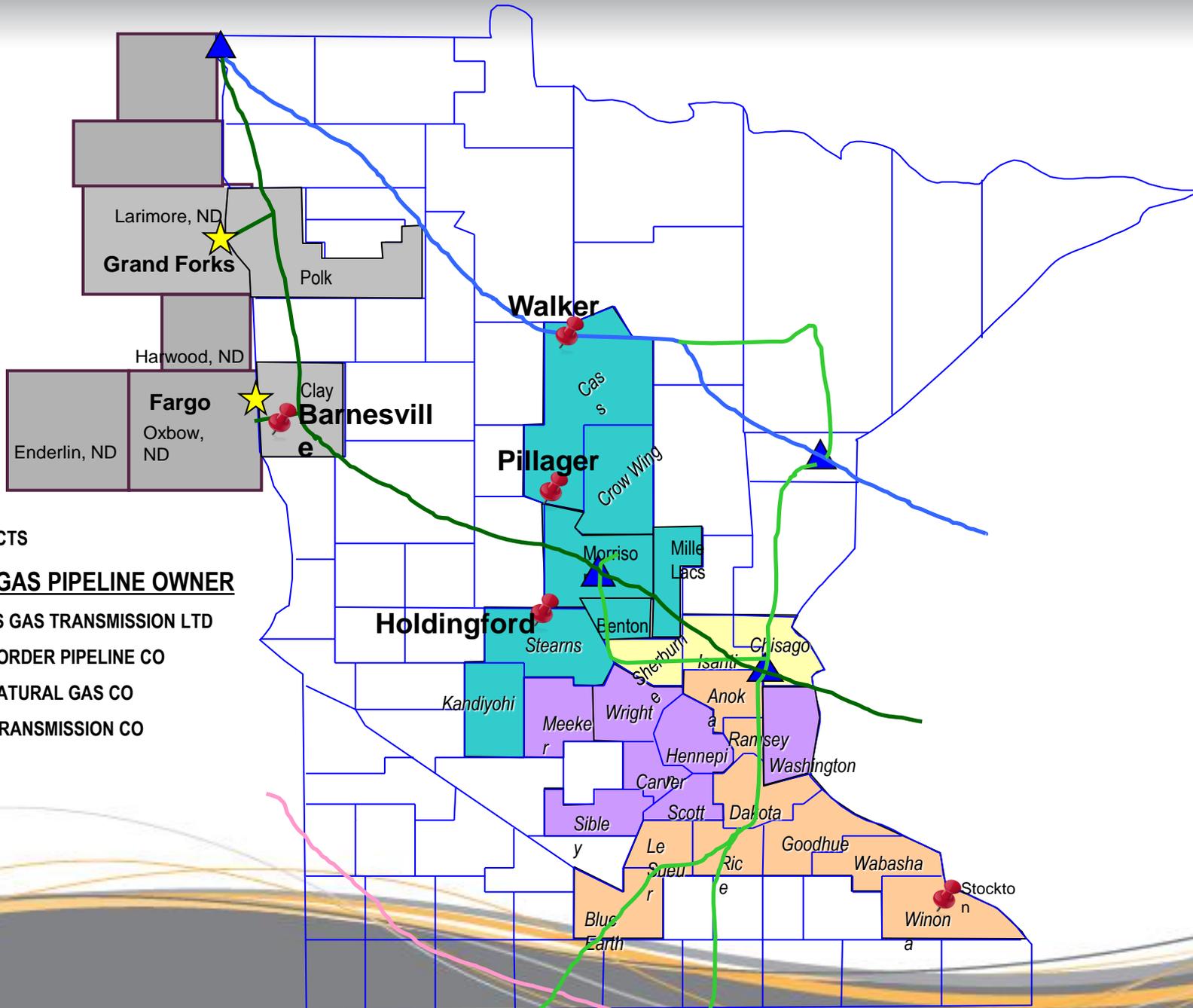
CenterPoint Energy	
<b>Retail Customers:</b>	<b>804,754</b>
Retail Revenue (\$000s)	\$ 951,099
Revenue per Customer	\$ 1,182

# Minnesota - Household Heating

- Since 1980, fuel oil's share of household heating has declined 19%
- Electricity and natural gas offset fuel oil's decline with gains of 8% each
- Growth in propane made up the remaining 3% share

**Minnesota: Home Heating Fuel Trends**





Larimore, ND  
**Grand Forks**

Harwood, ND  
**Fargo**  
 Oxbow, ND

Clay  
**Barnesville**

**Walker**

**Pillager**

**Holdingford**

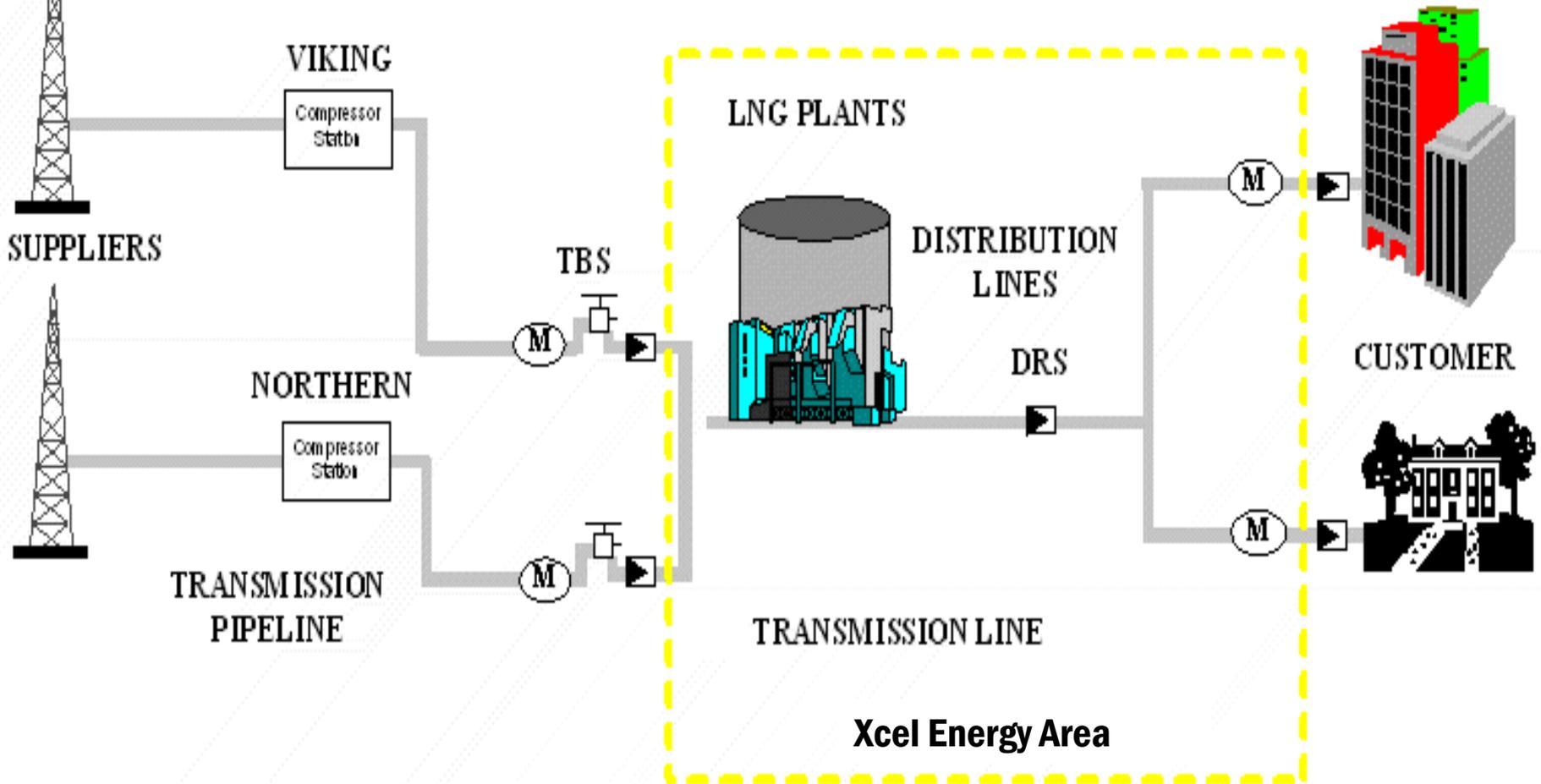
Stockton  
 Winona

-  INTERCONNECTS
- NATURAL GAS PIPELINE OWNER**
-  GREAT LAKES GAS TRANSMISSION LTD
-  NORTHERN BORDER PIPELINE CO
-  NORTHERN NATURAL GAS CO
-  VIKING GAS TRANSMISSION CO
-  PROSPECTS

# Successful Conversions - NSPM

- **New area surcharge**
  - Brainerd, Taylors Falls, Glyndon
  - 2014 working on: Barnesville, Holdingford, & Pillager
- **Builders/Developers – Competitive gas service gains in new residential construction**
- **Commercial Sites**
  - ◆ Grain dryers
  - ◆ Asphalt plants
  - ◆ Poultry barns

# Natural Gas Distribution



# Residential Natural Gas – Example

<i>*Estimates based on Average Customer Use</i>	<i>Monthly</i>	<i>Annual</i>
New Area Surcharge (NAS)	\$25.99	\$311.88
Residential Service Charge	\$9.00	\$108.00
*Est. Cost of Gas (Avg. 1000 therms /year)	Use/Month	\$670.00
<b>Annual Sub-Total</b>		<b>\$1,089.88</b>

- **\*Average Cost per therm past 3 years:**
  - ◆ **\$0.67/therm x avg. annual use per customer = 1000 therms**
- **Estimated annual residential cost \$1,090 or \$1.09/therm**
  - ◆ **\$1,090 / 1000 therms per year or \$1.09/therm**
  - ◆ **An equivalent cost of propane = \$0.997 per gallon**

\*Based on 1000 therms average annual use; plus any applicable taxes or tariff fees

**EXAMPLE FROM OTHER PROJECT – NAS  
UNDETERMINED AS OF JUNE 2014**

# Small Commercial Natural Gas – Example

<i>*Estimates based on Average Customer Use</i>	<i>Monthly</i>	<i>Annual</i>
New Area Surcharge (NAS)	\$100.00	\$1,200.00
Small Commercial Service Charge	\$25.00	\$300.00
*Cost of Gas (Avg. 3,200 therms/yr)	Use/Month	\$1984.00
		\$3,484.00

- **\*Average Cost per therm past 3 years:**
  - ◆ **\$0.62/therm x avg. annual use per customer = 3,200 therms**
- **Estimated annual small commercial cost is \$3,484 or \$1.09/therm**
  - ◆ **\$3,484 / 3,200 therms per year or \$1.09/therm**
- **An equivalent cost per gallon of propane = \$0.996 per gallon**

\*Based on 3200 therms average annual use; plus any applicable taxes or tariff fees

**EXAMPLE FROM OTHER PROJECT – NAS  
UNDETERMINED AS OF JUNE 2014**

# Natural Gas Infrastructure Expansions

## ■ Gas Extension Costs

- ◆ Typical Residential Tipping Point >\$25/month Surcharge
- ◆ Customer incurs the cost of the project. Non-participants typically do not incur project costs.
- ◆ Appliance conversions: furnace, water heater, other appliances

## ■ Regulatory

- ◆ Contribution in aid of construction - CIAC
- ◆ Experience in other States

## ■ Gas Business Development

- ◆ Dedicated points of contact that can facilitate conversions
- ◆ Trained and Qualified Construction Crews

