Delivering Natural Gas
Our Experience

Nolan Steiner, Director of Strategic Growth
September 15, 2015
- Serves electric and natural gas customers in Washington, Idaho, Oregon
  - 369,000 electric customers
  - 329,000 natural gas customers

- Serves electric customers in Juneau, Alaska
  - 16,000+ electric customers
Traditional natural gas utility supply chain

Key functions of natural gas utility

<table>
<thead>
<tr>
<th>Customer service</th>
<th>Safety - e.g., leak detection</th>
<th>Regulatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering design</td>
<td>Compliance</td>
<td>Policy</td>
</tr>
<tr>
<td>Permitting</td>
<td>Meter reading</td>
<td>Rate design</td>
</tr>
<tr>
<td>Construction</td>
<td>Billing</td>
<td>Resource planning</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Accounting, Finance</td>
<td>Public awareness</td>
</tr>
<tr>
<td>Service calls</td>
<td>Sales, marketing</td>
<td>Energy efficiency</td>
</tr>
</tbody>
</table>
Non-traditional utility served by LNG supply

- Exploration
- Natural Gas Procurement
- Pipeline Capacity
- LNG
- Liquefaction
- Shipping
- LNG Storage
- Regasification
- Local Distribution

If LNG:

Deliver to customers:
- Residential
- Commercial
- Industrial

Added steps:
- Deliver to customers:
  - Residential
  - Commercial
  - Industrial

Natural gas
LNG added steps - illustrative

**LIQUEFACTION**
Gas is liquefied through super cooling process

**STORAGE / REGAS**
LNG is stored & regasified when needed

**SHIPPING**
Liquefied gas is moved in ships to storage destination
<table>
<thead>
<tr>
<th>Area of study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural gas demand &amp; residential survey</td>
</tr>
<tr>
<td>Natural gas supply chain optimization</td>
</tr>
<tr>
<td>Commercial interviews</td>
</tr>
<tr>
<td>Economic impacts of natural gas in Juneau</td>
</tr>
<tr>
<td>Gastineau Channel &amp; service to Douglas Island</td>
</tr>
<tr>
<td>Engineering cost estimate, design &amp; permitting</td>
</tr>
<tr>
<td>LNG supply &amp; shipping logistics – RFI</td>
</tr>
<tr>
<td>Other &amp; ongoing</td>
</tr>
</tbody>
</table>
“Net benefits” of natural gas

<table>
<thead>
<tr>
<th>Customers</th>
<th>Community</th>
<th>Investors</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
video link

Avista ~ experience matters
Thank You

Nolan Steiner
Director of Strategic Growth
Nolan.Steiner@avistacorp.com
(509) 495.4479

Jessie Wuerst
Senior Communications Manager
Jessie.Wuerst@avistacorp.com
(509) 495.8578