Bureau of Indian Affairs Providers Conference
The History of UCM

Emil Usibelli started Usibelli Coal Mine in 1943 with used equipment and a contract for 10,000 tons of coal to the Army’s Ladd Airfield.
Three Generations of Usibelli Leadership

Emil Usibelli founded the mine in 1943.

Joe Usibelli Jr. has been president since 1987.

Joe Usibelli became president in 1964.
The People of Usibelli Coal Mine

- About 112 Full-time employees
- Average years of service: 12
- Average age in the workforce: 45
- 36% are 2nd, 3rd, 4th generation employees
Coal Facts

- The U.S. has 27% of the world’s coal reserves
- Alaska has 50% of the U.S. coal reserves
- Railbelt, >1,000 years reserve at current consumption
Usibelli Today

- 1.2 million tons production in ‘15
- Only operating coal mine in Alaska
- Supply 100% of Alaska’s in state demand
- Exports started 1984
Shovel & Truck
Current Alaskan Coal Customers

* cogeneration

- Ft Wainwright*
- Eielson AFB*
- Clear AFS*
- UAF*
- Aurora Energy*
- Healy #1
- Healy #2
Seward Coal Terminal

- Owned by Alaska Railroad Corporation
- Operated by Aurora Energy Services, LLC
Historical Coal Export Markets

• South Korea - 15 million tons since 1984
• Chile - 3.3 million tons since 2003
• Japan - 840,000 tons since 2008
• Previous “Test” Shipments:
  – Taiwan
  – Russia
  – China
Alaska’s Clean Coal Reduces Emissions

- UCM coal - ultra-low in sulfur – 0.1 %
- Powder River Basin (WY) coal - 0.5%
- Eastern US bituminous grade coal - 6.0%
- Low mercury – *Alaskan coals contain up to 2/3’s less mercury per pound than other coals in the Pacific Rim thermal coal market*
Reclamation at Usibelli

Poker Flats Reclamation - July 2003

Poker Flats Reclamation - September 2014
Reclaiming the Land

Collecting seeds and cones from indigenous trees and shrubs.

Each year UCM plants about 10,000 trees.
Coal is vital to Alaska.
Coal is a Critical Source Interior Alaska Energy

Interior Energy Capacity, by Source:

- Coal: 29%
- Diesel: 41%
- Naphtha: 13%
- Natural Gas: 11%
- Wind: 2%
- Hydro: 4%
GVEA Average Cost per kWh, by Source in 2012

- Diesel: $0.30
- Naphtha: $0.17
- Natural Gas: $0.11
- Coal: $0.05
- Wind: $0.10
- Hydro: $0.05
### Average GVEA Production Costs per kWh in 2012 and Percent of Total Generation by Fuel Type

<table>
<thead>
<tr>
<th>Energy Source</th>
<th>Cost per kWh</th>
<th>Percent of Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diesel</td>
<td>$0.30</td>
<td>13%</td>
</tr>
<tr>
<td>Naphtha</td>
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</tr>
<tr>
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</tr>
<tr>
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</tr>
<tr>
<td>Coal</td>
<td>$0.05</td>
<td>29%</td>
</tr>
<tr>
<td>Hydro</td>
<td>$0.05</td>
<td>4%</td>
</tr>
</tbody>
</table>

Source: GVEA 2013, RCA 2013
25 States with less than 40% or less coal generated electricity have an average cost of 12.0 cents kWh.

25 States with more than 40% coal generated electricity have an average cost of 8.8 cents per kWh.

Source: EIA, Electric Power Monthly, March 2012
<table>
<thead>
<tr>
<th>Location</th>
<th>Number of Vendors</th>
<th>Spending ($millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchorage</td>
<td>105</td>
<td>$27.0</td>
</tr>
<tr>
<td>Fairbanks North Star Borough</td>
<td>195</td>
<td>21.6</td>
</tr>
<tr>
<td>Denali Borough</td>
<td>27</td>
<td>0.5</td>
</tr>
<tr>
<td>Mat-Su Borough</td>
<td>28</td>
<td>0.4</td>
</tr>
<tr>
<td>All Other Alaska</td>
<td>45</td>
<td>1.2</td>
</tr>
<tr>
<td><strong>Total Spending in Alaska</strong></td>
<td><strong>400</strong></td>
<td><strong>$50.7</strong></td>
</tr>
</tbody>
</table>