

**Chugach Electric Association**

**Fire Island Wind Project  
Cost/Benefit Analysis  
Review**

**Renewable Energy Committee  
May 15, 2007**

# Project Description

- **50 MW of Capacity**
- **135,000 MWh of Energy**
- **Need transmission line to Fire Island**
- **Chugach, GVEA, ML&P and HEA are signatory to Fire Island Wind Project MOU**
- **Fire Island Wind Project is a JAA project**

# Major Assumptions

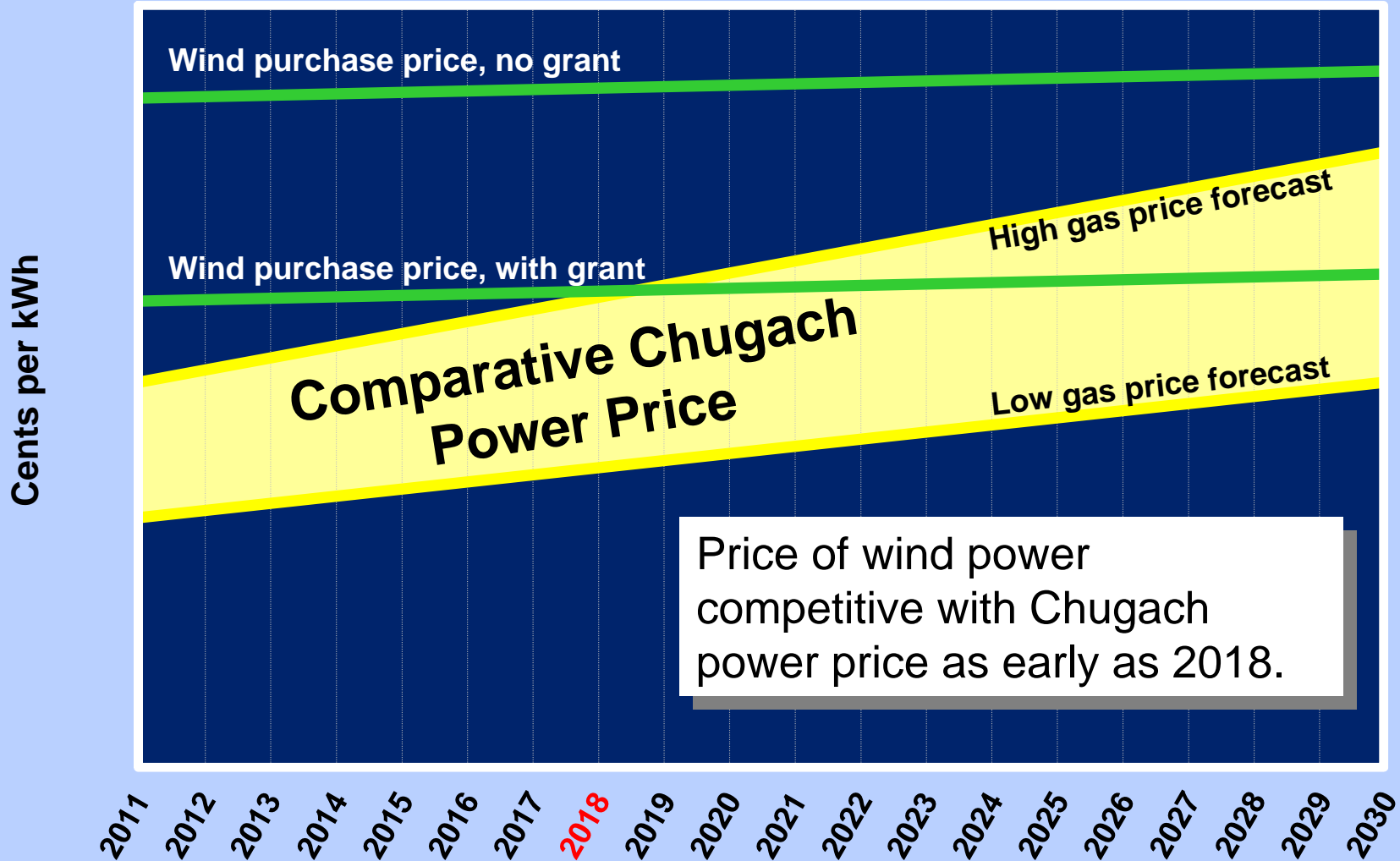
- **Wind project is operational in 2011**
- **20-year project**
- **Purchased power rate is 8 cents/kWh**
- **Infrastructure cost is 3.8 cents/kWh or project receives \$54 million grant**
- **Comparative grid power cost over next 20 years depends on gas price**

# Major Assumptions

## Infrastructure Cost (\$M)

|                      | <u>Estimate</u> | <u>With 25%<br/>Contingency</u> |
|----------------------|-----------------|---------------------------------|
| – Civil (Roads/Camp) | 9.3             | 11.6                            |
| – Barge Landing      | 4.2             | 5.3                             |
| – Electrical         | <u>29.8</u>     | <u>37.3</u>                     |
| – Total              | 43.3            | 54.2                            |

# Break Even Price Range



# Summary

**Currently project is not economic:**

- **Low gas price forecast**
- **No grant**

**Project may be economic in the future:**

- **High gas price forecast**
- **Grant for 100% of infrastructure cost**

# Summary

## Same As February 2006 Operations Committee

- **Complete ongoing funded studies**
- **Defer Chugach development of wind power until economic**
  - **Subsidies become available**
    - **Grants**
    - **Low-cost financing**
  - **Substantial increase in fuel prices**
  - **Substantial decrease in capital cost**