Reinforcing the I-5 transmission highway

I-5 Corridor Reinforcement Project: What it is and why we need it

August 2010
Not-for-profit federal agency
Provides 1/3 of Northwest’s electricity
Owns & operates 3/4 of regional high-voltage transmission grid
BPA’s commitment

- High reliability
- Low rates
- Environmental stewardship
- Accountability to the region
Project need

- Local energy demand growth and requests for transmission service
- By 2016 system reaches critical thermal limits threatening our ability to keep the lights on
- By 2018 system reaches critical voltage limits compounding matters and posing an even greater threat
Times have changed

- Local population has doubled, bringing new homes, businesses, jobs, hospitals & schools
Times have changed (cont.)

- Homes are larger with more appliances, computers & other things plugged in

1973
1,660 sq.ft.

2007
2,521 sq.ft.
Times have changed (cont.)

- From 2005 through 2009, regional energy use is on the rise

<table>
<thead>
<tr>
<th></th>
<th>Winter</th>
<th></th>
<th>Summer</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cowlitz PUD</strong></td>
<td>![↑ 7%]</td>
<td></td>
<td>![↑ 6%]</td>
<td></td>
</tr>
<tr>
<td><strong>Clark PUD</strong></td>
<td>![↑ 6%]</td>
<td></td>
<td>![↑ 21%]</td>
<td></td>
</tr>
<tr>
<td><strong>PGE</strong></td>
<td>![↑ 17%]</td>
<td></td>
<td>![↑ 18%]</td>
<td></td>
</tr>
</tbody>
</table>
Business and industry changes

- Previously, industries were large and some allowed interruptible loads
- New technology industries need steady, uninterrupted power
- Reliability is even more important now
- Economic development goals rely on low-cost, reliable power
Local utility need

In an average or better water year our Swift project has more output than we need in Cowlitz County, and our wind projects are similar. I think its important for Cowlitz County residents to understand that it helps them from an economic standpoint – a rates standpoint – if we have surplus power, we can sell it – IF THERE IS TRANSMISSION AVAILABLE – to keep our rates lower.

Brian Skeahan, general manager
Cowlitz County PUD
Industrial Power Needs

On a trip to Asia with Bart Phillips, CEO Columbia River Economic Development Council, Governor Christine Gregoire met with a CEO of a high-tech manufacturer.

Gov. Gregoire: Is there anything that I can do as governor to make your Clark County operations more profitable...

High-Tech CEO: Can you do something about improving the quality of the power back in southwest Washington?

Bart Phillips: Quantity is almost equally important.
We’ve taken action

- **Conservation:** The Northwest is a national leader in capturing energy efficiency. In the past 30 years, we have captured 3,700 aMW of conservation, which is enough to meet more than half of the local power needs, our future goals are even more aggressive.

- **Technology:** BPA is using several innovative, interim solutions to further reduce congestion.
Benefits of a new line

- Keeps the lights on for the hottest days and coldest nights
- Promotes clean, green renewable energy and brings it from source to switch
- Gives local utilities:
  - Access to affordable and reliable power
  - Access to energy markets to sell excess electricity, helping keep local rates lower
BPA’s transmission grid
About the Project

- 500-kilovolt transmission
- New substations at
  - Castle Rock, Wash.
  - Troutdale, Ore.
- 70 miles apart
- Many route segments
Factors we consider

- Electrical needs for reliability and safety
  – Will it work?
- Impact to human and natural environment
  – homes, businesses, schools, etc.
  – fish, wildlife, vegetation, soils, water, etc.
- Economic and social environment
  – property values, views, cultural resources, recreation, etc.
Decision timeline

- Fall/Winter 2010
  - Identify center lines and rights-of-way for proposed route segments, notify the public

- 2010-2011
  - Refine project design
  - Post monthly updates to project website
  - Prepare draft environmental impact statement
  - Release draft EIS in fall 2011
  - Comment period and public meetings on draft EIS

- 2011-2012
  - Review comments and finalize the EIS

- Late 2012 or early 2013
  - Publish final EIS and announce agency decision
  - Construction could begin as early as 2013
We will continue to listen

- Your feedback helps shape the routes we consider and the best locations for the towers and access roads
- We appreciate and rely on your input
- We encourage you to stay engaged and involved
Working with you to keep the lights on

www.bpa.gov/go/i5