



NorthWestern Energy's Transmission – now and into the future

WSCLA Conference

July 14, 2010

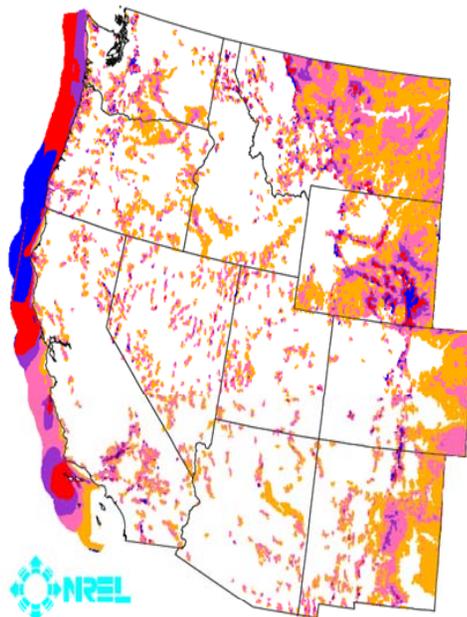


NorthWestern[™]
Energy

Delivering a Bright Future



Regional Wind Resource Potential



Wind Power Class	Resource Potential	Wind Power Density at 50 m W/m ²	Wind Speed ^a at 50 m m/s	Wind Speed ^a at 50 m mph
3	Fair	300 - 400	6.4 - 7.0	14.3 - 15.7
4	Good	400 - 500	7.0 - 7.5	15.7 - 16.8
5	Excellent	500 - 600	7.5 - 8.0	16.8 - 17.9
6	Outstanding	600 - 800	8.0 - 8.8	17.9 - 19.7
7	Superb	800 - 1600	8.8 - 11.1	19.7 - 24.8

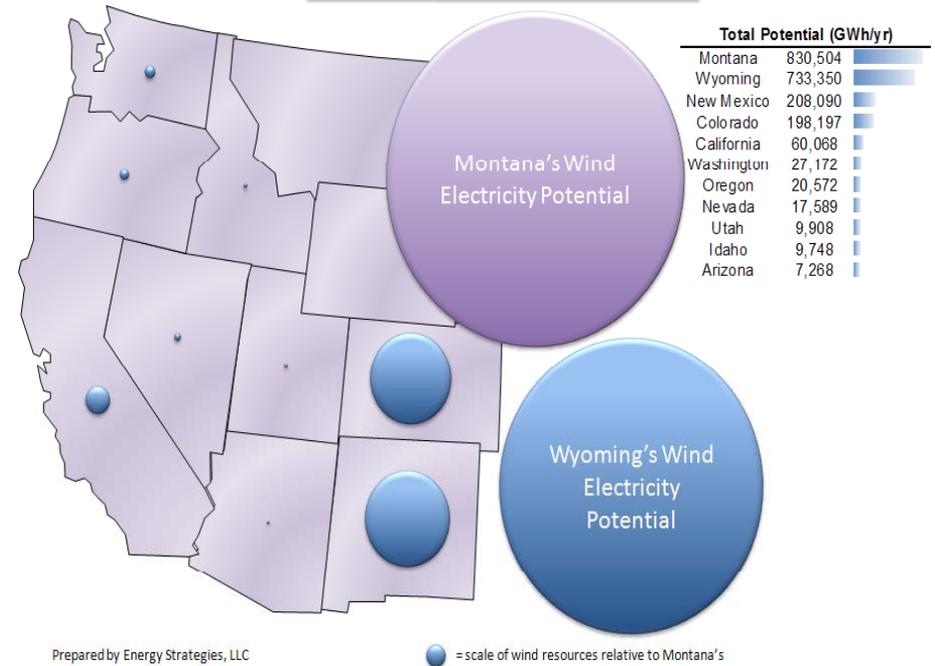
^a Wind speeds are based on a Weibull k value of 2.0



U.S. Department of Energy
National Renewable Energy Laboratory

23-JAN-2008 1.1.3

Wind Electricity Potential (GWh/yr) Class 4-7

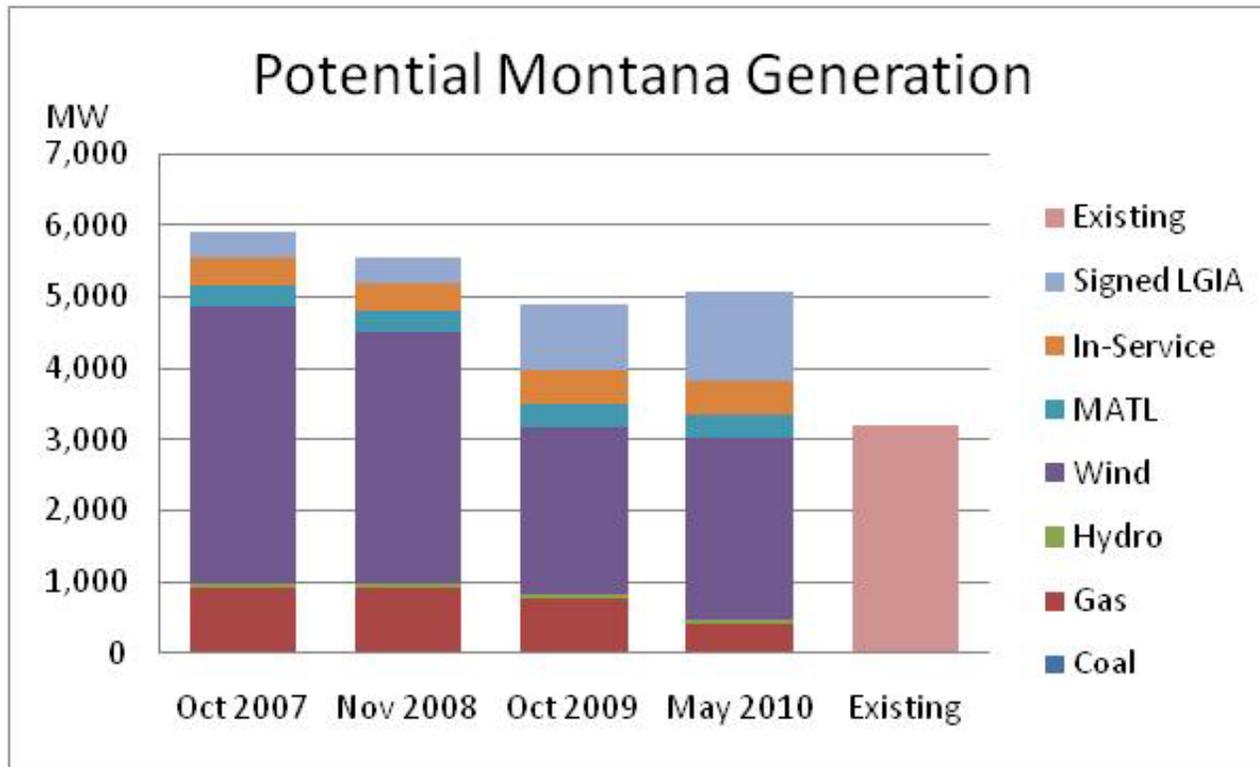


Prepared by Energy Strategies, LLC

NorthWestern
Energy

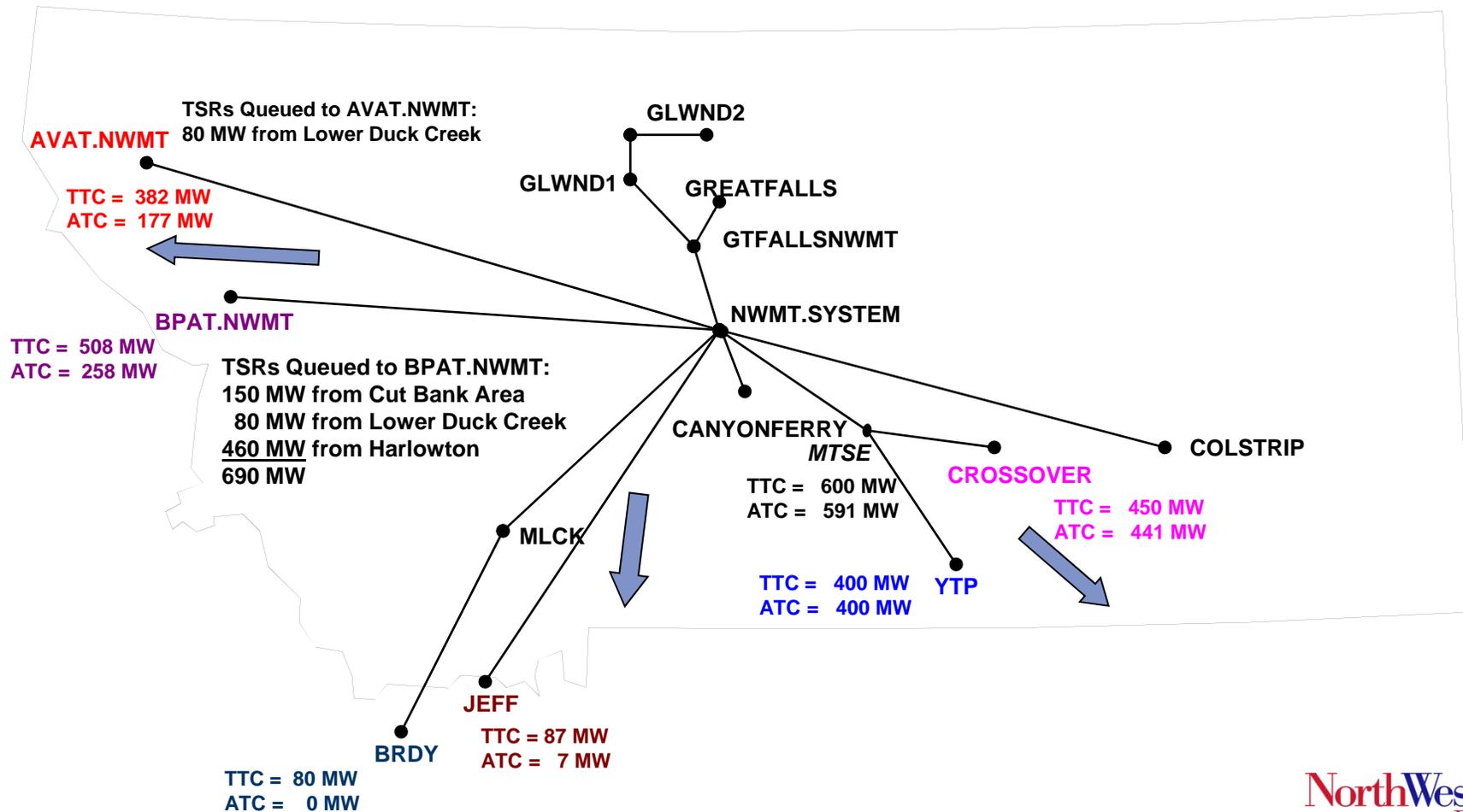
Delivering a Bright Future

Current NWE Demand

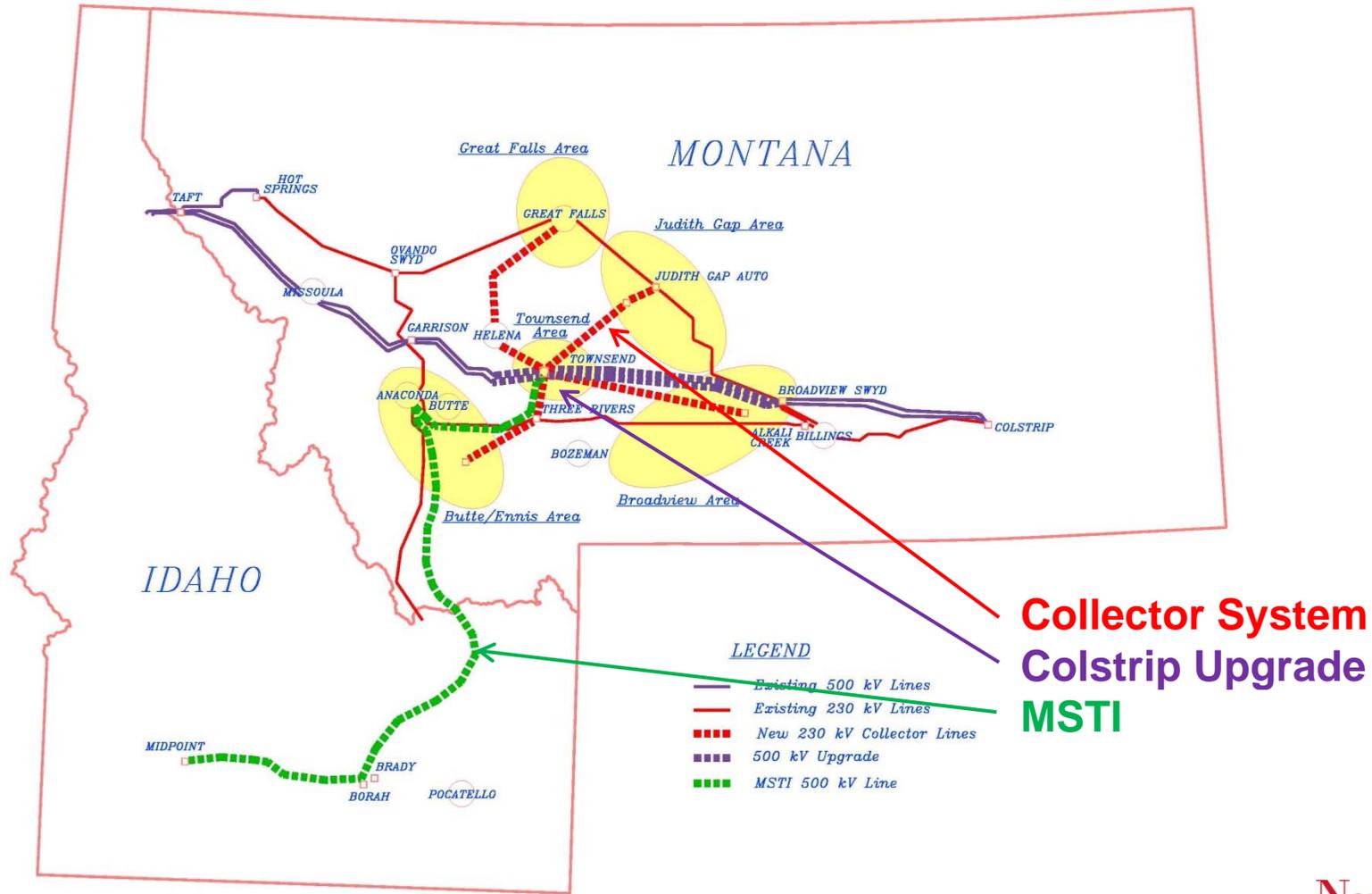


Current Transmission Status

Maximum Long Term Firm ATC Export Capability And West-bound Transmission Service Requests (as of May 2010)



NWE proposed transmission projects



Colstrip Upgrade

- **We anticipate it being a part of NWE’s FERC rate base**
 - » Capacity would be made available under NWE OATT
- **Rate treatment is different for Upgrade compared to NWE’s other two transmission projects**
 - » MSTI- separate corporation and separate rates based on higher of “OR” pricing policy (based on FERC order). However, under NWE’s single OATT
 - » Collector—lines will be a part of NWE rate base *but* costs will be directly assigned to customers contracted to use the line, based on generator lead lines/generation interconnection process
 - » Upgrade—part of NWE rate base costs to be a part of NWE rate
 - ◆ Do not expect upward pressure on rates
- **Project is independent from Collector or MSTI**

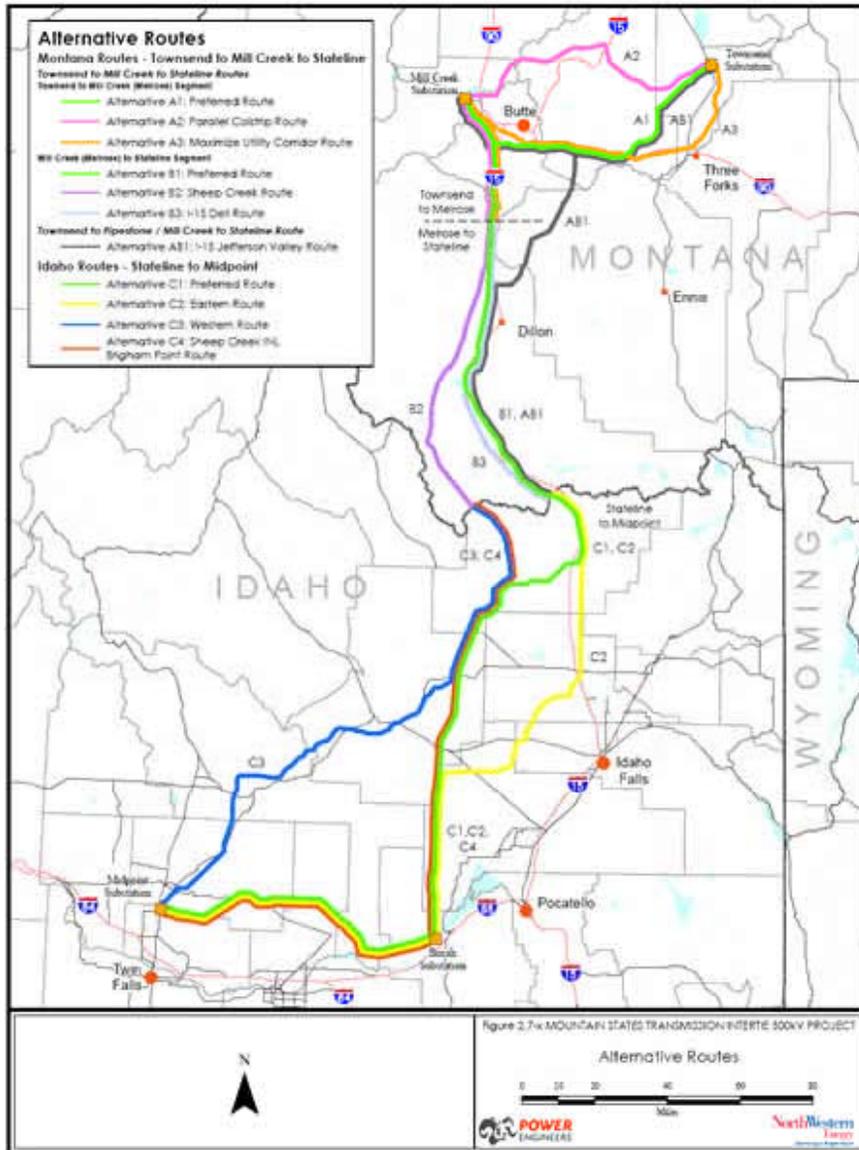
Colstrip Upgrade



■ Project status:

- » BPA and NWE working on more detailed system studies to determine more specifically the upgrades needed.
- » Expect to start Phase I of the WECC Rating Process this year.
- » CTS transmission owners reviewing Colstrip Transmission Agreement and OATTs to form the basis for commercial integration of the upgrades and develop process for jointly handling Interconnection Requests, Transmission Service Requests and other system upgrades.
- » CTS transmission owners requested for BPA to provide information to determine the feasibility of rolling the Montana Intertie into BPA's Network Rate. Scheduled for June 17 work shop.
- » CTS transmission owners and BPA reviewing Montana Intertie Agreement to determine changes needed to facilitate upgrade.

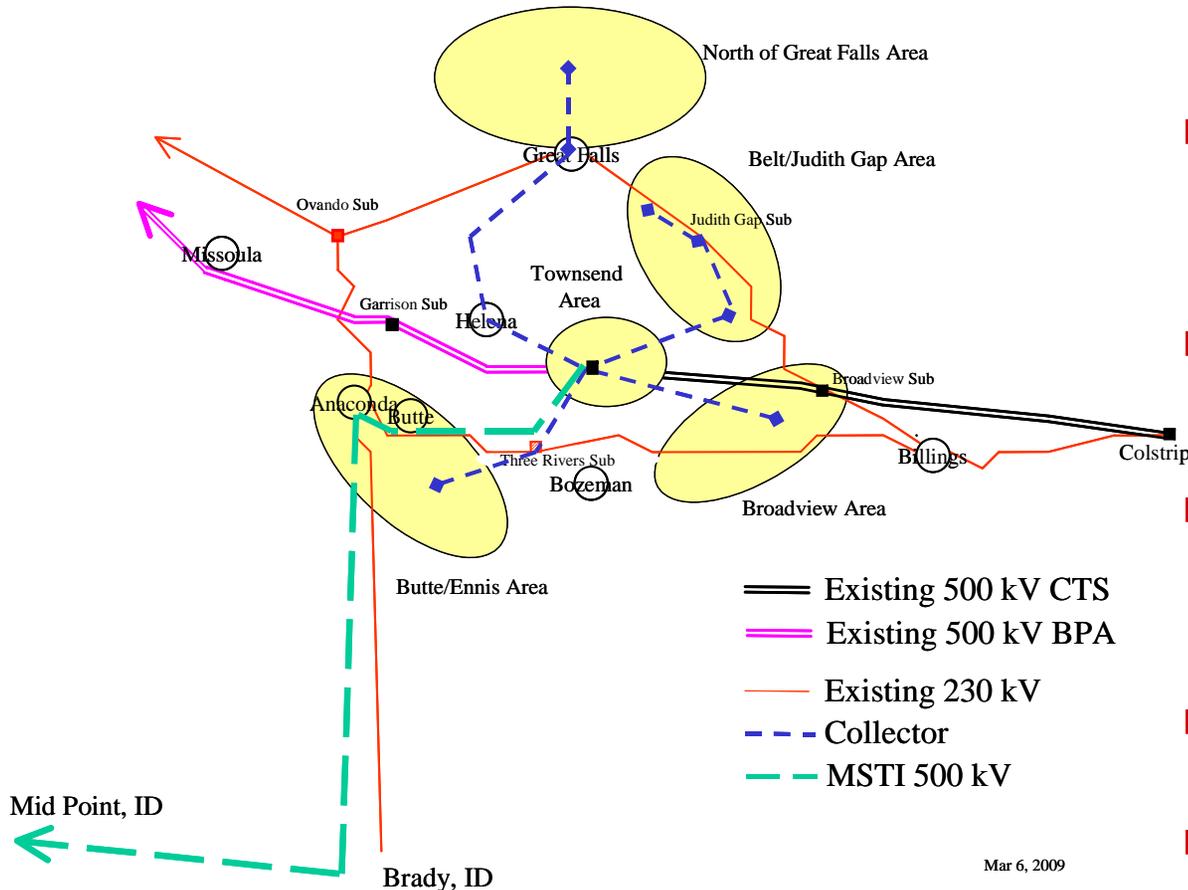
Mountain States Transmission Intertie (MSTI) Project



- **500 kV AC line from Townsend MT to Midpoint Substation near Twin Falls ID**
- **Approximately 430 miles depending on final route**
- **2 Major Substations in MT; 1 interconnection in Idaho**
- **Advanced Stages of Public Siting and Review – began in 2007**
- **1500 MW Path Rating Capacity Expected**
- **Current Project cost is \$1 billion**

Transmission Collector System

Collector System Example



- Approximately 3,000 MW wind in generation interconnection queue
- Provides a radial gathering system for new generation to access MSTI
- Informational Meeting with Customers in Early Summer 2009
- The actual Project defined through an Open Season in Late Summer 2010
- Current Project cost is \$220 million
- The target in service date is late 2014

Renewable Integration Issues

- **Regulation Requirements**
 - » Control Performance Standards
 - » NWE Experience

- **Mitigation**
 - » Mill Creek Generation Station
 - » Regional Initiatives
 - ◆ ACE Diversity Interchange
 - ◆ Dynamic Scheduling System
 - ◆ Within Hour Scheduling/ITAP