
# DOE – QER Public Meeting – Cheyenne WY, August 21, 2014

## Electric Transmission: Federal, State and Local Permitting and Siting Issues

Mike Cashell – Vice President - Transmission

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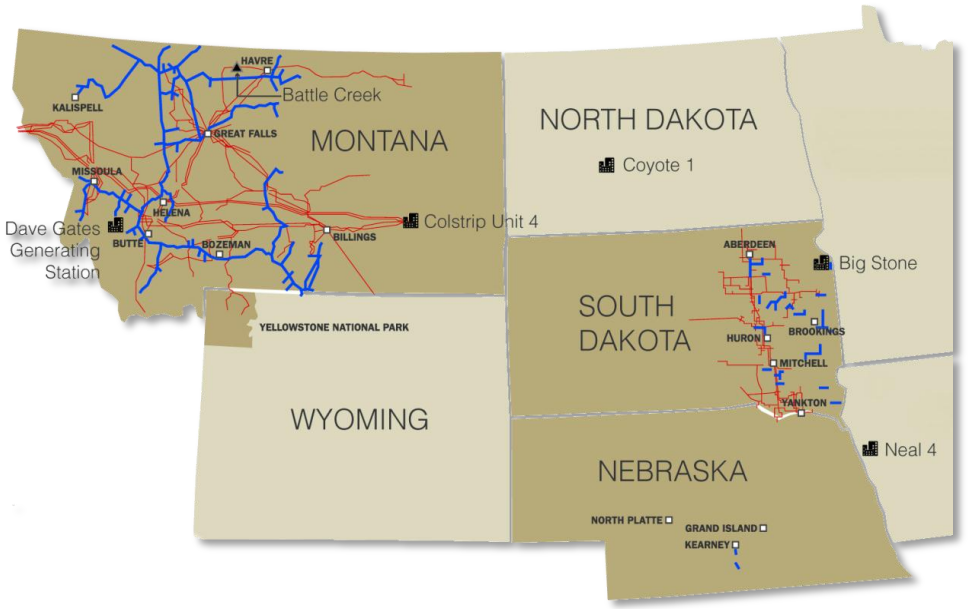
# NorthWestern at a Glance

673,200 customers and 123,000 square miles of service territory in Montana, South Dakota and Nebraska




- 1,500 employees, including 1,170 in MT
- 412* megawatts of owned MT generation capacity, including coal, natural gas and wind
  (*including DGGS)
- Pending Hydro Project Purchase



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# NorthWestern at a Glance

- 6,900 miles of MT electric transmission lines
- 17,500 miles of MT electric distribution lines
- 5,000 miles of MT natural gas distribution pipeline
- 2,000 miles of gas transmission pipeline, plus gathering and storage
- Due to recent purchases, NWE owns about 75 billion cubic feet of natural gas reserves – all dedicated to serve our MT customers

# **Key** Priorities

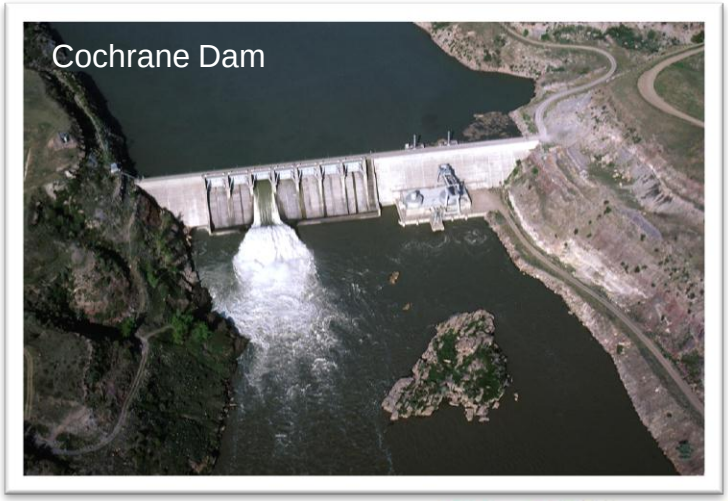
- Earn regulatory approval for $900 million acquisition of PPL Montana hydro facilities
- Continuation of seven-year, $370 million electric and natural gas Distribution System Infrastructure Project (DSIP)
- Complete $44 million Jackrabbit-to-Big Sky electric transmission upgrade
- Continue siting and permitting of $40 million Carbon-Stillwater electric transmission project in south-central Montana

# A Portfolio for the 21st Century

- Announced, in September 2013, the acquisition of eleven base load hydroelectric generating facilities representing 633 megawatts of capacity and one storage reservoir from PPL Montana
- These assets are consistent with our vision of providing safe and reliable energy
- Asset purchase price of $900 million, subject to various regulatory approvals, including the Montana Public Service Commission

**Overview of Hydro Facilities(1)**

| Plant | Net Capacity (MW) | Ownership% | COD | River Source | FERC License Expiration | 5-Yr Avg. Capacity Factor(2) |
|---|---|---|---|---|---|---|
| Black Eagle | 21 | 100% | 1927 | Missouri | 2040 | 73.6% |
| Cochrane | 69 | 100% | 1958 | Missouri | 2040 | 49.1% |
| Hauser | 19 | 100% | 1911 | Missouri | 2040 | 79.3% |
| Holter | 48 | 100% | 1918 | Missouri | 2040 | 72.4% |
| Kerr(3) | 194 | 100% | 1938 | Flathead | 2035 | 64.5% |
| Madison | 8 | 100% | 1906 | Madison | 2040 | 89.2% |
| Morony | 48 | 100% | 1930 | Missouri | 2040 | 63.8% |
| Mystic | 12 | 100% | 1925 | West Rosebud Creek | 2050 | 48.2% |
| Rainbow | 60 | 100% | 1910 / 2013 | Missouri | 2040 | 77.5% |
| Ryan | 60 | 100% | 1915 | Missouri | 2040 | 79.8% |
| Thompson Falls | 94 | 100% | 1915 | Clark Fork | 2025 | 60.1% |
| ***Total*** | *633* | | | | | *66.1%* |




*(1) Hebgen facility (0 MW net capacity) excluded from figures. All facilities are "run-of-river" dams except for Kerr and Mystic, which are "storage generation"*
*(2) As of June 2013*
*(3) The Confederated Salish and Kootenai Tribes have an option to purchase Kerr from September 2015 thru 2025*

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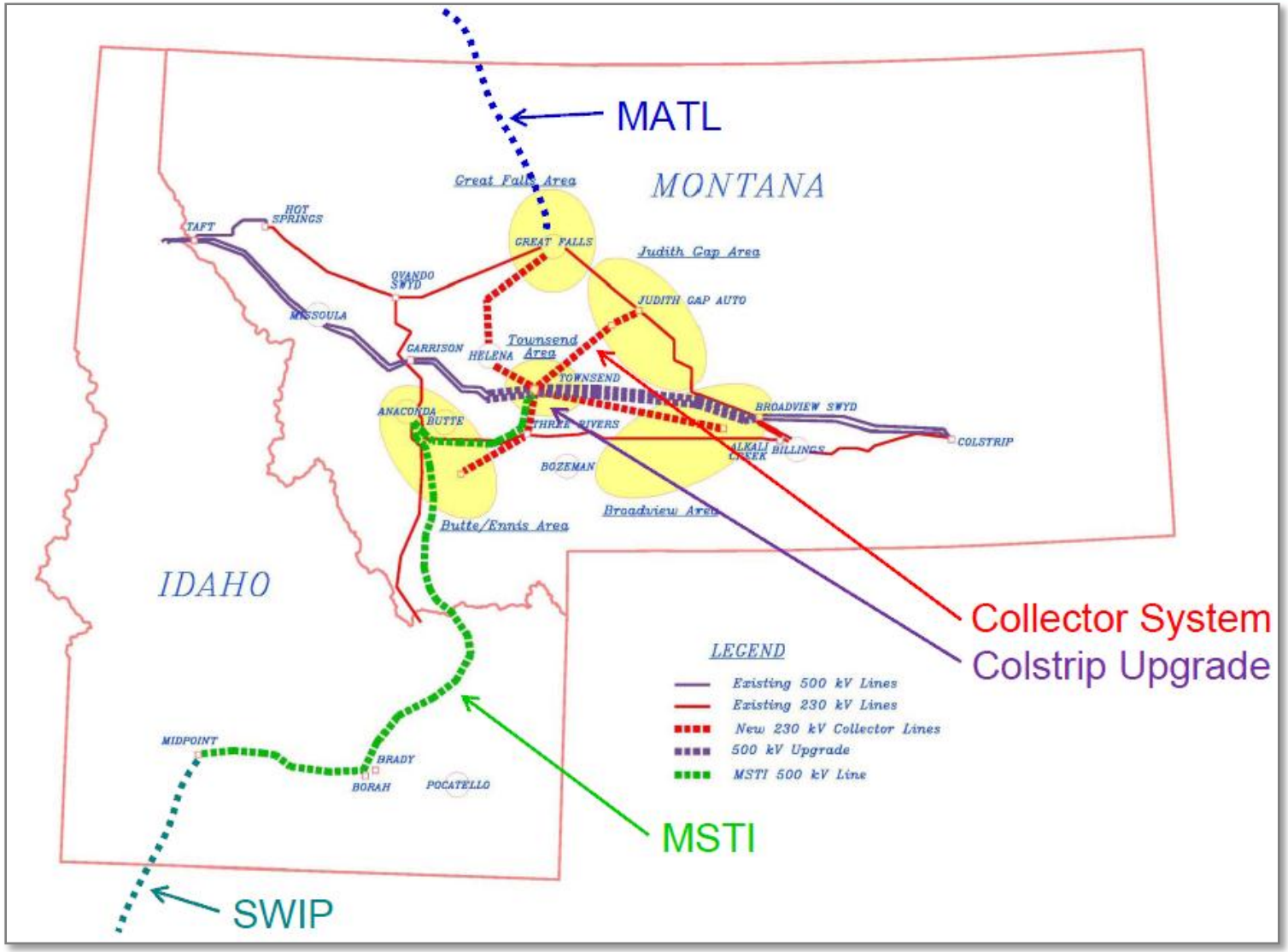
# NorthWestern and Adjacent Transmission Projects



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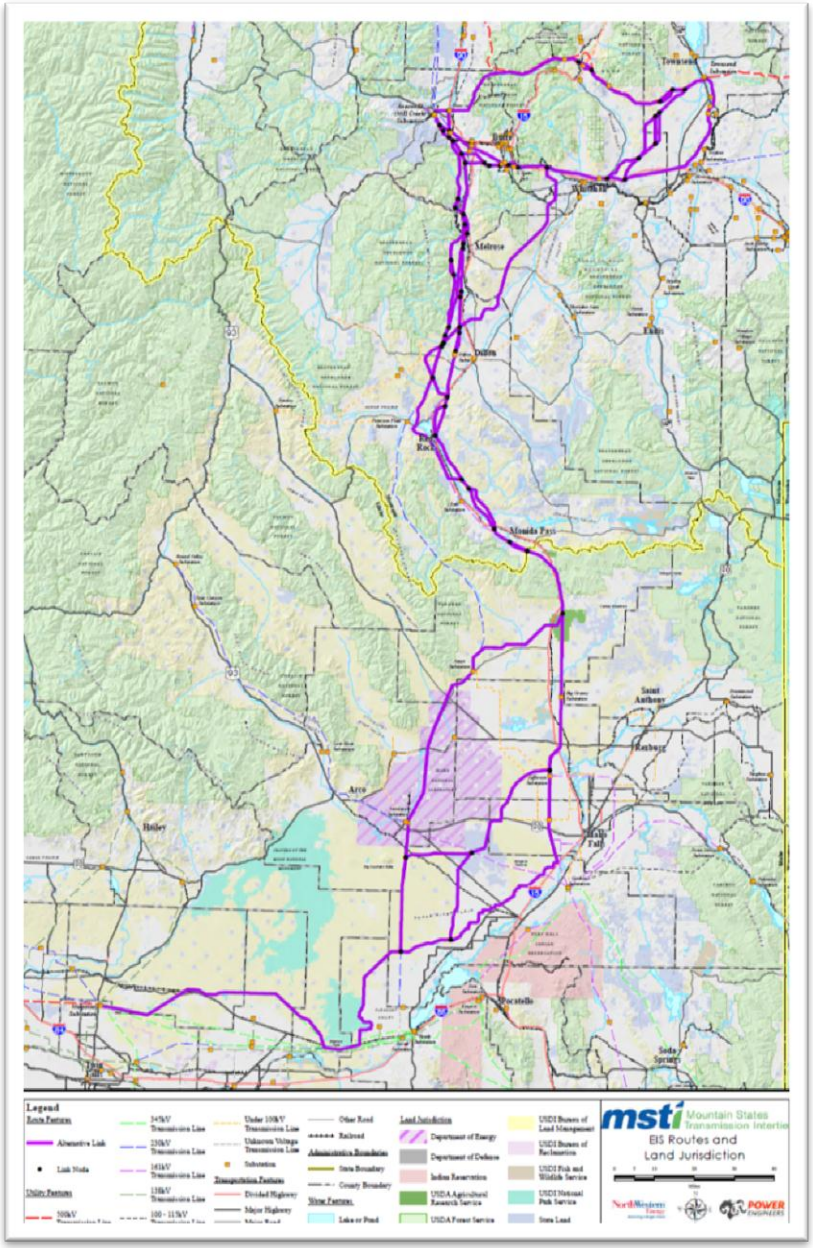
# Mountain States Transmission Intertie (MSTI)




- 500 kV AC line from Townsend MT to Midpoint Substation near Twin Falls ID
- Approximately 450 miles depending on final route
  - 70+% on State and Federal Public Lands expected
- 1500 miles of alternatives reviewed
- Public Siting and Review began in 2007
- MFSA Application filed in July 2008
- 1500 MW Path Rating
- Project cost approximately $1 billion

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# MSTI Purpose and Need

- The purpose of the MSTI Project is:
  - To provide a pathway for delivering renewable energy generated in Montana to areas throughout the western United States. MSTI will connect proposed new sources of clean energy, particularly wind power, to areas that need more electricity. MSTI is a response to customers' request for new transmission capacity
  - To strengthen the high-voltage transmission system in the western United States by helping to relieve current constraints and improving reliability

- The MSTI Project is needed because:
  - The Western US needs new sources of electricity
  - New sources of renewable energy produced in Montana need a pathway to communities that need the energy
  - Congestion on the western electric grid needs to be addressed

# The Challenges of Transmission Development

- May 2006 to June 2008 – Pre-Regulatory Applications
  - Engineering and Environmental Studies
  - Over 35 Gov't Consultations and Public Scoping Meetings

- June 2008
  - Filed MFSA Application and Federal SF299 Applications
  - BLM and MT DEQ Co-lead Agencies Responsible for the EIS
  - 10 Different Cooperating Agencies
  - Over 50 Various Permitting & Regulatory Authorities Required

- June 2008 to August 2012
  - Over 20 Agency Sponsored Scoping Meetings
  - 120+ NWE Sponsored Public Meetings and Briefings

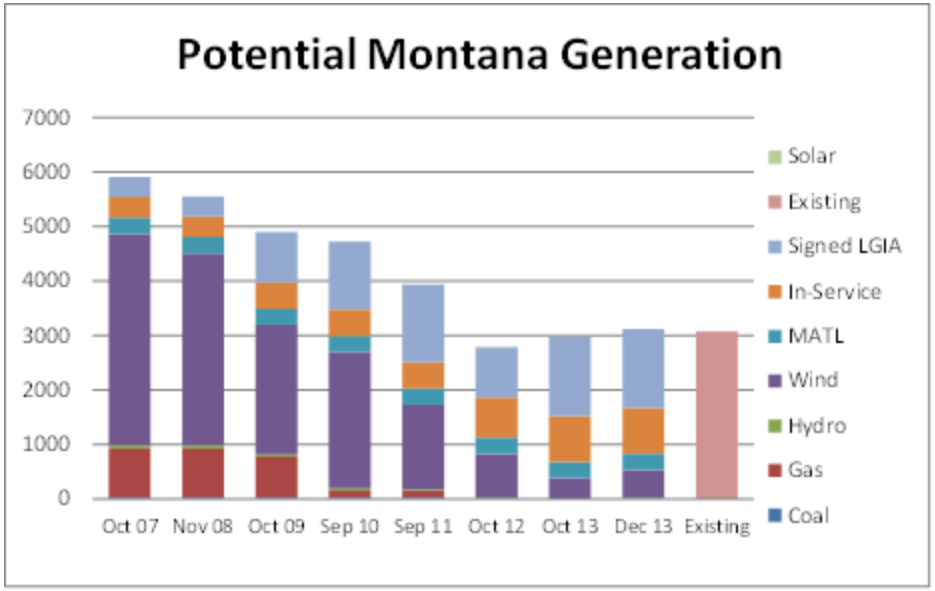
# The Saga of Transmission Development (cont'd)

- May 2010 – Jefferson County Montana filed suit against the MT DEQ for 'failure to adequately consult with the county'
  - District Court ruled in favor of Jefferson County
  - MT DEQ appealed the decision
- October 2011 - Montana Supreme Court unanimously overturned the lower court's decision
  - 18 month Project Delay
- January 2012 – Idaho State BLM Office decides an entirely new set of route alternatives are required to be studied to avoid Sage Grouse Habitat
- 50 months of analysis
- 3 ADEIS documents
- No DEIS ever produced

# MSTI Project Status

- MSTI Project Shelved
  - In August 2012 NWE called a “Time-Out” with the BLM, MDEQ and associated agencies and informed them to cease all activity on the EIS process, which eventually led to NWE writing off the $24 million in development costs incurred for the Project.
  - This decision was the result of:
    - The ever changing scope, schedule delays to complete the EIS and the significant cost of these delays to the Project
    - Lack of cooperation and coordination between agencies and with other entities – BLM, MDEQ, USFS, DOE, INL, USDA Sheep Experiment Station
    - MFSA is outdated and statute not compatible with today’s new transmission development world making it difficult for NWE to demonstrate purpose and need and commercial viability
    - Sage grouse issue created more delays and uncertainty with the decision on possible listing under the ESA not being made until 2015
    - Declining renewable energy market in MT- energy developers unable to secure customers, lack of national renewable energy standard, PTC uncertainty, restrictions on out of state renewables allowed by some western states

# NorthWestern Generation Interconnection Queue




| | Oct 07 | Nov 08 | Oct 09 | Sep 10 | Sep 11 | Oct 12 | Oct 13 | Dec 13 | Existing |
|---|---|---|---|---|---|---|---|---|---|
| **Coal** | 22 | 22 | 22 | 22 | 22 | 22 | 0 | 0 | |
| **Gas** | 898 | 898 | 741 | 120 | 120 | 0 | 0 | 0 | |
| **Hydro** | 64 | 64 | 50 | 42 | 35 | 12 | 0 | 12 | |
| **Solar** | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | |
| **Wind** | 3,880 | 3,520 | 2,375 | 2,508 | 1,547 | 787 | 380 | 515 | |
| **MATL** | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | |
| **In-Service** | 375 | 375 | 480 | 480 | 480 | 736 | 845 | 845 | |
| **Signed LGIA** | 368 | 368 | 929 | 1,255 | 1,432 | 920 | 1,444 | 1,444 | |
| **Existing** | | | | | | | | | 3,073 |
| **Total** | 5,906 | 5,547 | 4,897 | 4,727 | 3,936 | 2,797 | 2,969 | 3,117 | |



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# Policy Issues Affecting Transmission Development

- Lack of coordinated and comprehensive regulatory process
  - Difficulty in satisfying competing federal, state, and local needs
  - Need centralized siting process for interstate transmission that serves regional and/or national interests
- State level market protection (at the time Project was abandoned)
  - Mainly CA – preference to in-state renewable projects for job growth
  - Restrictions placed on out of state wind even if lower cost
- Need federal policy support for ITC and PTC
  - Without clarity renewable initiatives don't make near term financial sense
  - Short horizon on Treasury grants and wind tax credits expire YE 2013
- Uncertainty increasing from state economic challenges, budget issues, political change
  - Potential impacts – reduction or delay of RPS standards, incentive phase outs
- Montana Issues
  - Eminent domain legislation (likely an on-going issue in Montana)

# Lessons Learned

- **Marketing**

  Issues

  1.Slower energy demand growth in the west

  2.MT renewable energy developers unable to secure customers

  3.Lack of national renewable energy standard, PTC uncertainty

  4.Restrictions on out of state renewables allowed by some western states

  5.During 2009 NWE conducted a Transmission Road Show to several western states to promote the value of Montana's wind resources and encourage development

# Lessons Learned/Suggestions

**•Siting, Permitting, and Environmental**

Issues

1.BLM

a.EIS process was continually delayed because of open ended scoping process, which pushed out the project schedule and increased costs

b.Better cooperation needed among other entities – MDEQ, USFS, DOE, INL, Sheep Experiment Station

c.Better communication and coordination with other stakeholders. Idaho sage grouse example

d. Many consultants and agency resource staff with little electric transmission experience

2.MDEQ

a.MFSA is outdated and statute not compatible with today's new transmission development world making it difficult for NWE to demonstrate purpose and need and commercial viability

b.Need better coordination of MFSA and MEPA

c.Better coordination and cooperation needed with federal agencies

d.Scoping process was open ended with new alternate routes and LRO's added after process was supposed to be done

e.Jefferson County lawsuit against MDEQ concerning inadequate consultation delayed the project an additional 18 months even though the MDEQ eventually prevailed

3.Idaho

a.Lack of state siting process - requires approval from all counties

b.Sage grouse issue created more delays and uncertainty with the decision on possible listing under the ESA not being made until 2015

# Lessons Learned

- **Public Outreach**

Issues

1.Despite our attempt to inform the public about the MSTI Project through numerous open houses, meetings with elected officials, and presentation to community groups in all the impacted counties, many people still criticized NWE and the agencies for not keeping them informed about the Project.

2.The 3rd Party MSTI Review Project validated previous work done by NWE on permitting and siting and is generally viewed as a method that could be used by siting authorities to help bring community involvement into the siting process in a collaborative way.

3.Looking back, it may have been beneficial to have the MSTI Review Group involved earlier in the Project to assist in resolving stakeholder issues.

# Lessons Learned/Observations

- **Public Opposition**

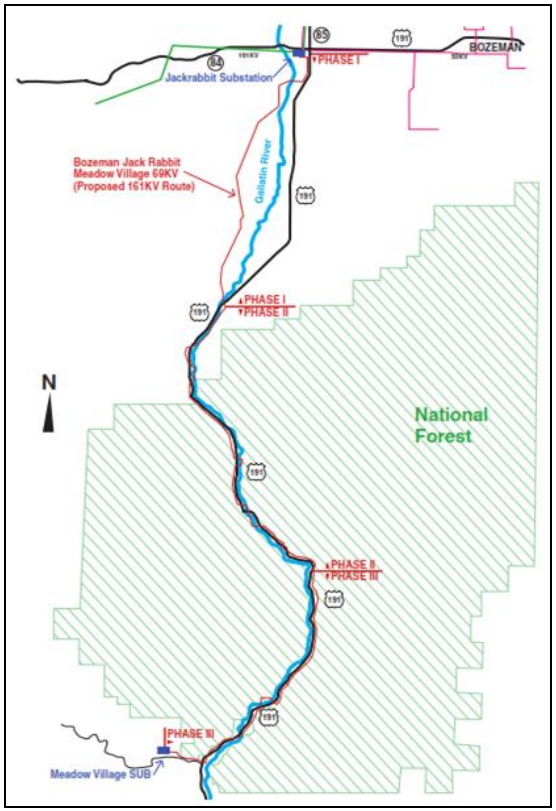
  Issues

  1.Several landowner opposition groups were formed in Montana including: Concerned Citizens Montana, MoveMSTI, Keep It Rural, Save Scenic Jefferson Valley Coalition, and Friends of Southwest Montana. In Idaho, the Power County MSTI Citizens Task Force was formed along with opposition groups in other counties.

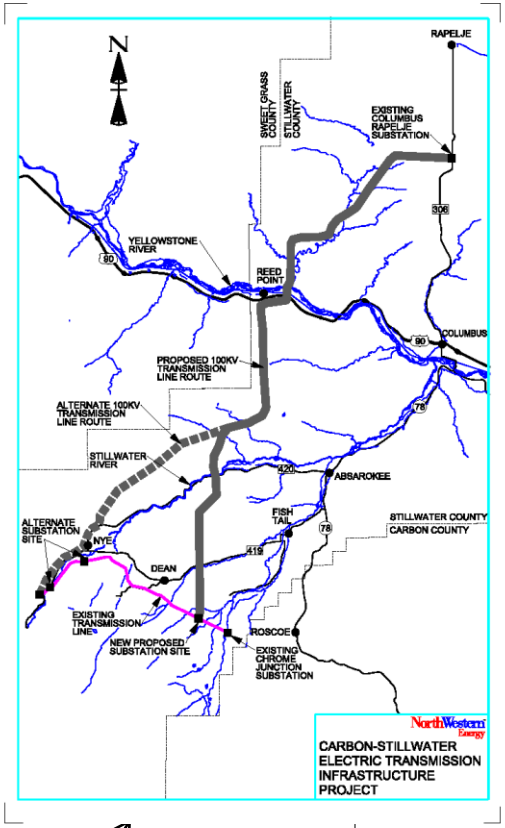
  2.Local residents impacted by the project felt that MSTI should be on public, not private land and property rights should be respected with existing energy corridors utilized to minimize health and environmental impacts. Additional concerns included EMF's, view shed, noxious weeds, eminent domain, property values, and wildlife habitat.

# Current NorthWestern Transmission Projects

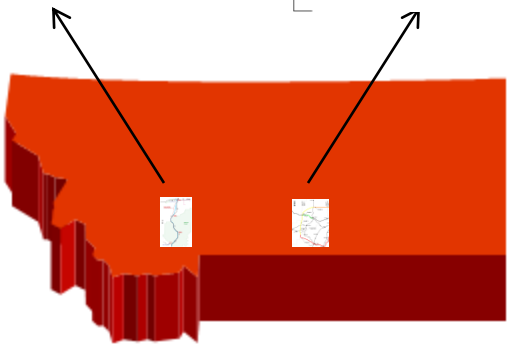
**Jack Rabbit – Big Sky 161kV**

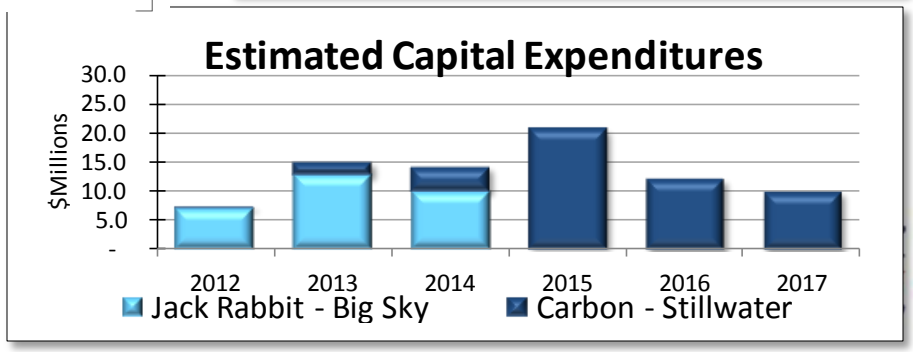



**Carbon - Stillwater 100kV**




**NorthWestern Energy continues to make significant investments to upgrade our transmission system to add capacity and improve reliability. Two such projects are: Jack Rabbit – Big Sky 161kV Line and Carbon - Stillwater 100kV line and substation upgrades. With a total capital investment of over $80M, these are two of several projects in our maintenance capex program that are necessary to meet customer needs and load growth in our service territory.**





# Siting “Success” - Jack Rabbit – Big Sky 161kV

- Project Budget / Schedule
  - Within our Montana Service Territory
    - Growing load in Big Sky, MT
  - 36 Miles in Length
  - 69 kV upgrade to 161 kV
    - Mostly in same ROW
  - Estimated Cost of Project - $44 Million
  - Spent on Project to date - $17.86 Million
  - Construction Started: Fall of 2012
  - Finish: Expected in the Early 2016

# Jack Rabbit – Big Sky 161kV

- Permitting
  - About 2/3 private, 1/3 Federal Lands
  - Gallatin National Forest (GNF) - Special Use Permit (SUP) – acquired on November 26, 2013. Started on SUP the first quarter of 2008.
    - While this process was ultimately successful, it took over 6 ½ years to complete
    - Strong relationship with GNF
  - Storm Water Pollution Prevention Plans (SWPPP) acquired for timber clearing and line construction.

# Jack Rabbit – Big Sky 161kV

- Summary
  - By end of 2013, 19 Miles of new 161kV line have been constructed out of a total of 36 miles
  - Crews started their work spring 2014 on the toughest stretch of the project.
  - Meadow Village Substation will be upgraded to 161/69 in late 2015.
  - The new line is expected to be energized to 161kV in the first quarter of 2016.

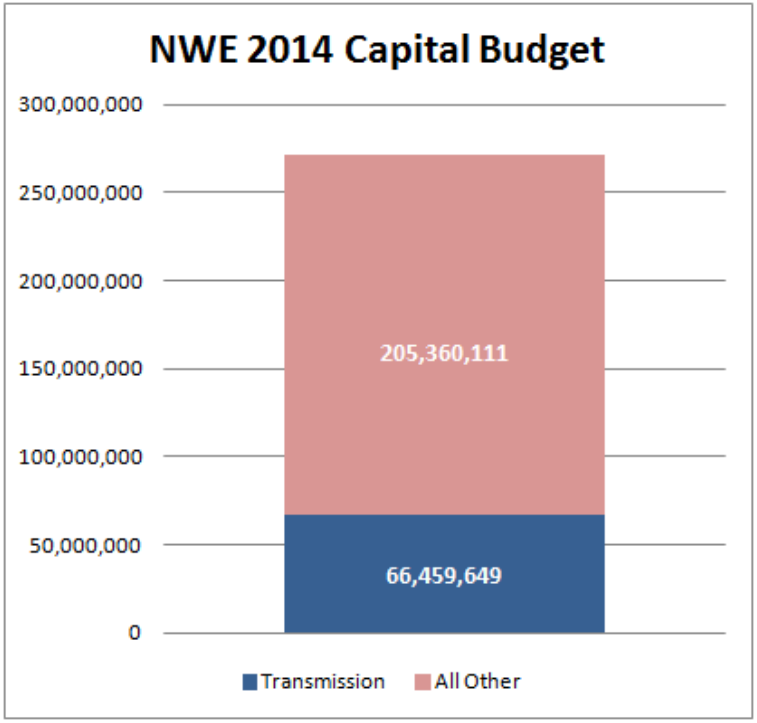
# Carbon – Stillwater 100kV

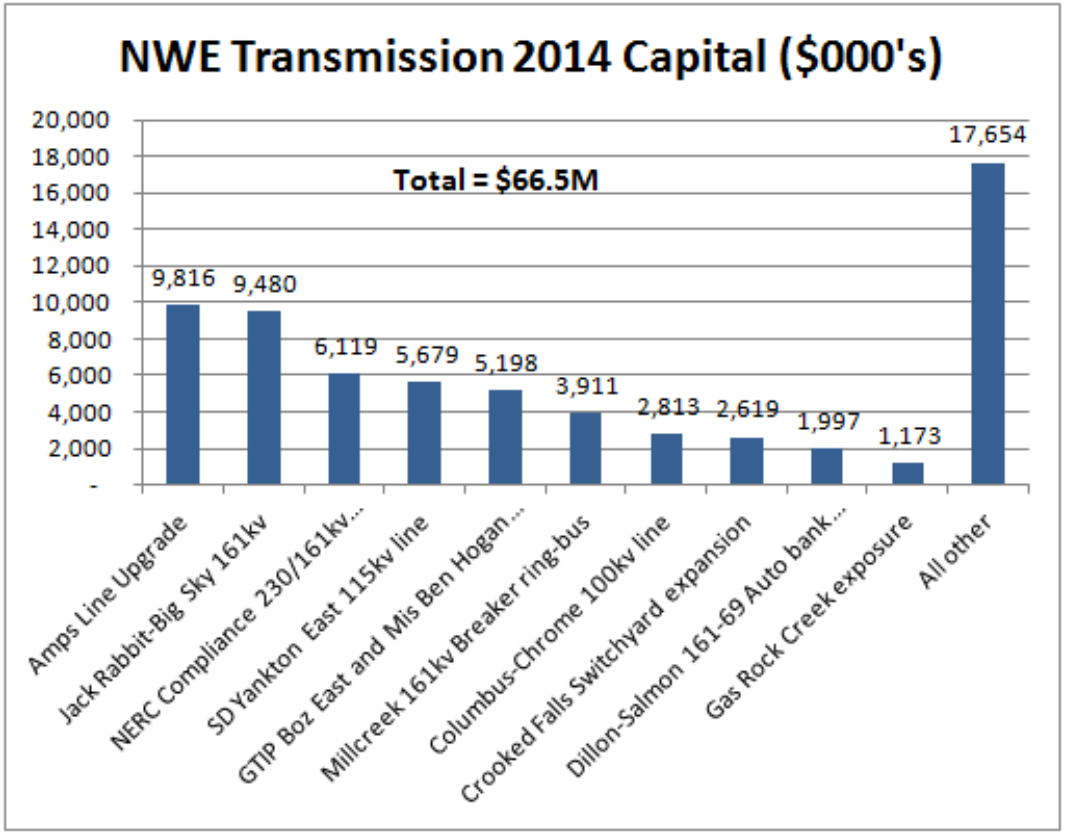
- Project Summary
  - Within our Montana Service Territory
  - First phase of ten year project to improve reliability and capacity in Carbon and Stillwater counties
  - Construction of 54 Miles of new 100kV line and several substation upgrades.
  - Phase One estimated cost - $40 million
  - Right-of-way acquisition is underway.
  - Line Construction expected to commence in 2015
  - The new line is expected to be energized to 100kV in the first quarter of 2017.

- Regulatory Approval
  - NorthWestern anticipates building the new line under a statutory exclusion from Montana Major Facility Siting Act (MFSA)
    - Have made very good progress
    - Applied Public Outreach “Lessons Learned” in MSTI
  - Federal NEPA for BLM & USFS Lands
  - Other Local & State Construction related Permits Required

# Transmission and NWE Capital – 2014 Budget

- Transmission accounts for 32% of the overall 2014 Capital Budget



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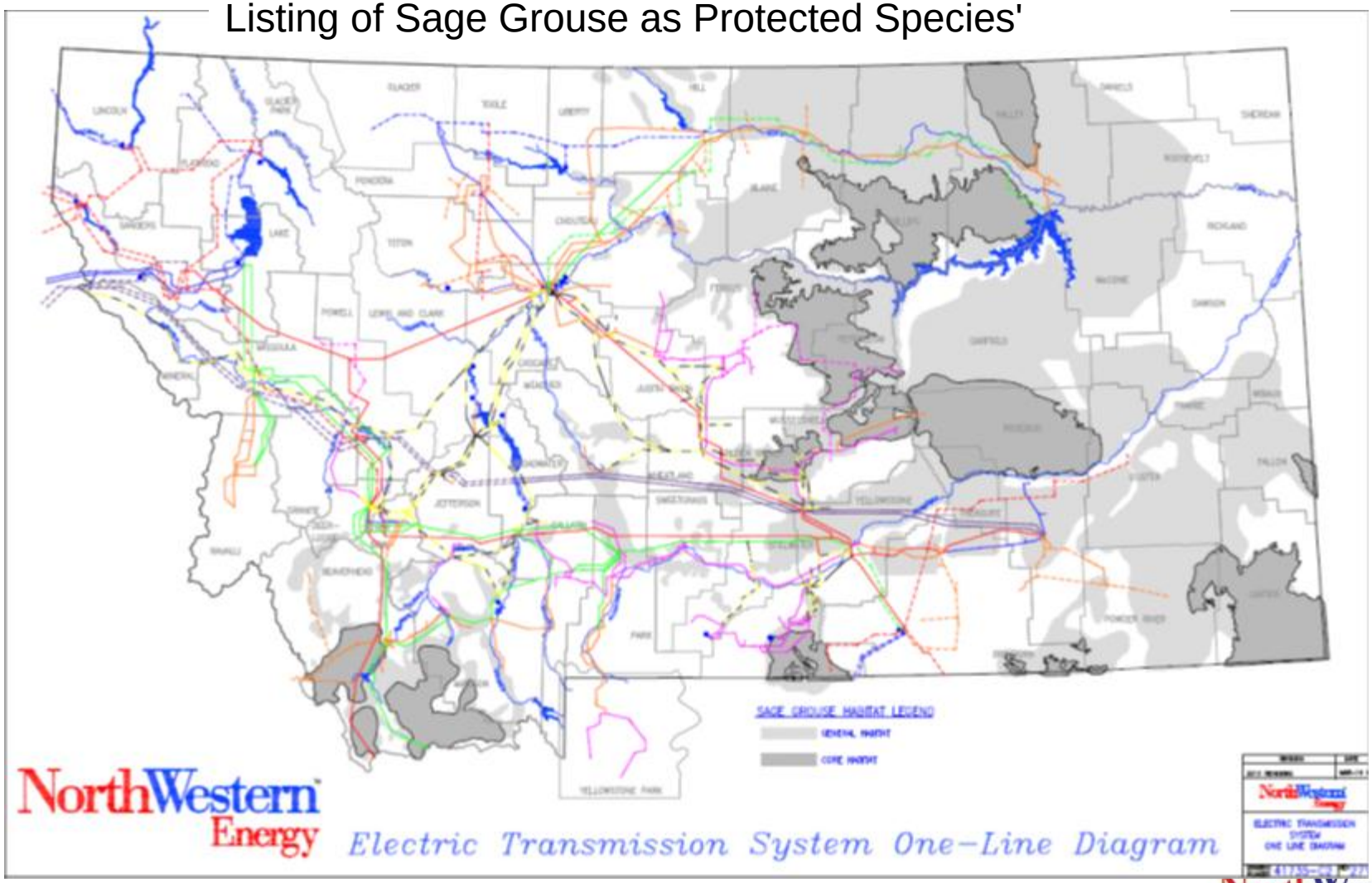
# Potential future Issue to Transmission Development

Listing of Sage Grouse as Protected Species'



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