

Joan M. Dukes
Vice-Chair
Oregon

Bruce A. Measure
Montana

James A. Yost
Idaho

W. Bill Booth
Idaho



Rhonda Whiting
Vice-Chair
Montana

Bill Bradbury
Oregon

Tom Karier
Washington

Phil Rockefeller
Washington

May 31, 2012

MEMORANDUM

TO: Council Members

FROM: Lauren Casey, Montana Energy Policy Analyst

SUBJECT: Northwestern Energy: 2011 Electricity Supply Resource Procurement Plan and Update on wind energy resource development

John Hines, Vice President - Supply, and John Bushnell, Lead Supply Planner, will brief the Council on Northwestern Energy's 2011 Electricity Supply Resource Procurement Plan and wind energy resource development, as well as answer questions of interest to the Council.

2011 Electricity Supply Resource Procurement Plan

Northwestern Energy (Northwestern), Montana's largest utility, is required by the Administrative Rules of Montana (38.5.8226) to submit a resource procurement plan to the Public Service Commission (PSC) every two years.

The 2011 Plan provides the Commission and stakeholders with a guide to the electricity resource procurement activities to be conducted by Northwestern via a 3-year action plan. The action plan is non-binding and lays out information about the types of resources Northwestern plans to acquire to meet the electricity needs of its customers while cost-effectively mitigating risk. It reflects the unique position that the company is in. In 2007, Northwestern began a process to recreate a vertically-integrated utility by rate-basing electric resources and to seeking regulatory approval before resources are required.

The current portfolio of resources is expected to deliver roughly 55% of forecast energy needs over the next 20 years; the Resource Procurement Plan addresses how best to meet the remaining 45%.

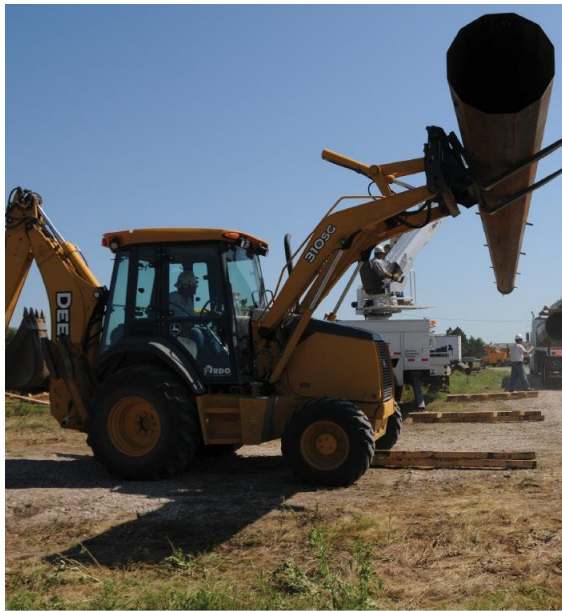
The full plan is available at:

http://www.northwesternenergy.com/display.aspx?Page=2011_Electric_Supply_Plan

Wind power developments

Wind resource development in Northwestern's portfolio is being driven by several factors including Montana's Renewable Energy Standard target of 15% of energy from renewable sources by 2015, as well as requirements to purchase power from PURPA qualifying facilities. Currently operational projects include Judith Gap (135 MW), Turnbull (13 MW), and Gordon Butte (9.6 MW). Projects underway include Spion Kop (40 MW), four 10 MW PURPA projects, and two small hydro projects (less than 2 MW).

q:\council mtgs\2012\06 june 2012\northwestern cm cg.docx

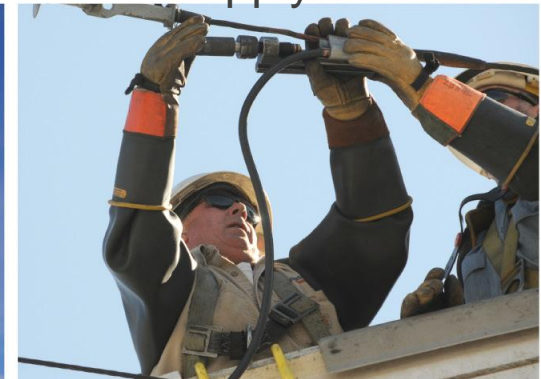


NWPCC PRESENTATION

June 12, 2012

John Hines – VP Supply

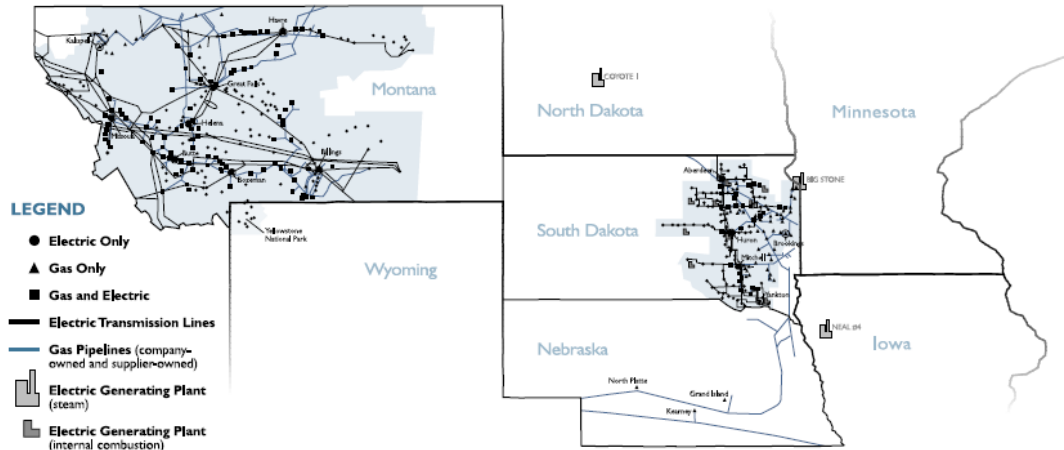
John Bushnell – Lead Supply Planner



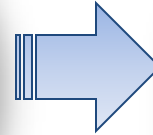
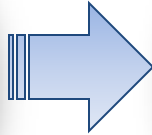
NorthWestern[®]
Energy
Delivering a Bright Future

WHO WE ARE – NWE FOOTPRINT

- 668,300 customers
 - 400,500 electric
 - 267,800 natural gas
- Approximately 123,000 square mile Service Territory
 - 27,600 miles of electric T&D lines
 - 9,375 miles of natural gas T&D lines
 - 17.75 Bcf natural gas storage
 - 7.7 Bcf natural gas proven reserves
- Total owned generation
 - MT – 372 MW – regulated
 - MT – 150 MW (regulation services) – regulated
 - SD – 316 MW (baseload) – regulated
 - SD – 171 MW (peaking) – regulated



WHO WE ARE (CONT.)



Energy Supply

Electric (MW)	MT	SD	Total
Base load coal	222	210	432
Other resources	150	106	256
Natural Gas (Bcf)	MT	SD	Total
Proven reserves	8.4	-	8.4
Annual production	0.55	-	1
Storage	18.0	-	18

Transmission

2010 Tx for Others	MT	SD	Total
Electric (GWh)	9,600	100	9,700
Natural Gas (Bcf)	18.3	-	18.3
System (miles)	MT	SD	Total
Electric	7,000	1,300	8,300
Natural gas	2,000	-	2,000

Distribution

Demand	MT	SD / NE⁽¹⁾	Total
Daily MWs	730	171	901
Peak MWs	1,225	341	
Annual GWhs	6,400	1,500	7,900
Annual Bcf	20.0	11.4	31
Customers	MT	SD / NE	Total
Electric	337,600	60,800	398,400
Natural gas	181,300	85,300	266,600
System (miles)	MT	SD / NE	Total
Electric	17,200	2,000	19,200
Natural gas	4,900	2,320	7,220

Note: Statistics above are as of 12/31/2010, except SD peak MW as a new summer peak was set in 2011

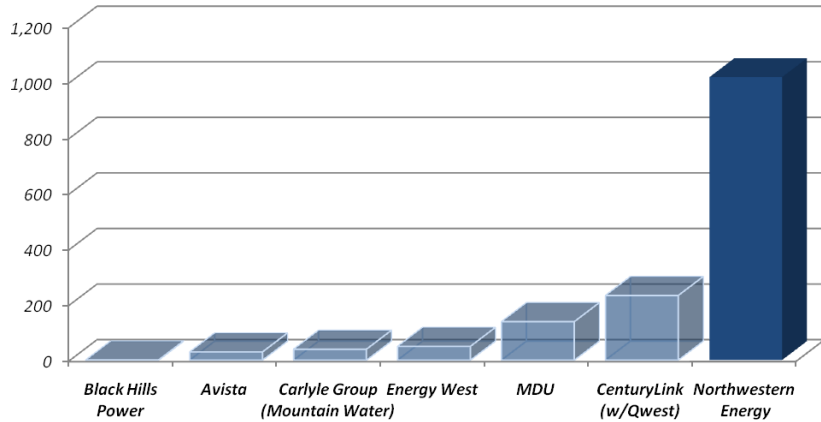
(1) Nebraska is a natural gas only jurisdiction

WHO WE ARE (CONT.)

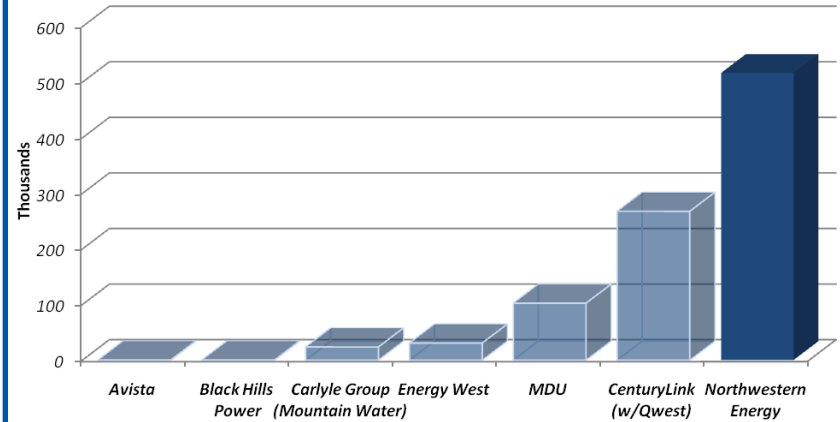
- Total assets: \$3.2 billion
- Total capitalization: \$1.77 billion
- Total Rate Base: \$1.875 billion (est.)
- Total employees: 1,400
 - Located in states with relatively stable economies with opportunity for system investment and grid expansion.
 - Footprint of service territory covers some of the best wind regimes in the U.S.
 - Unique opportunity to provide transmission services in two different power markets (West and Midwest).

NWE- A KEY INFRASTRUCTURE & SERVICE PROVIDER

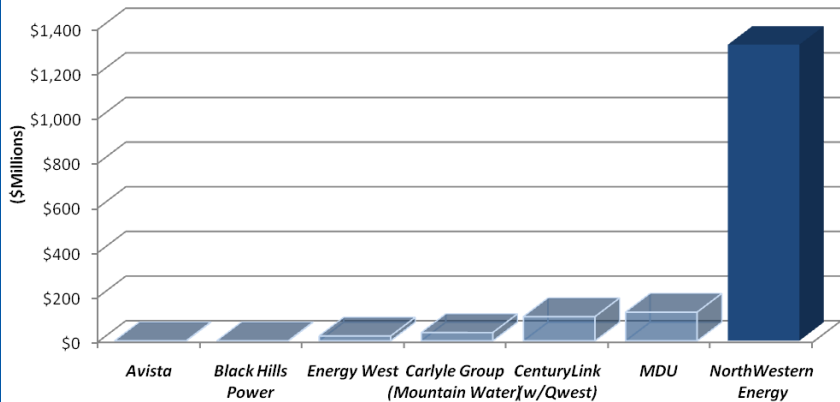
2010 Montana Employees



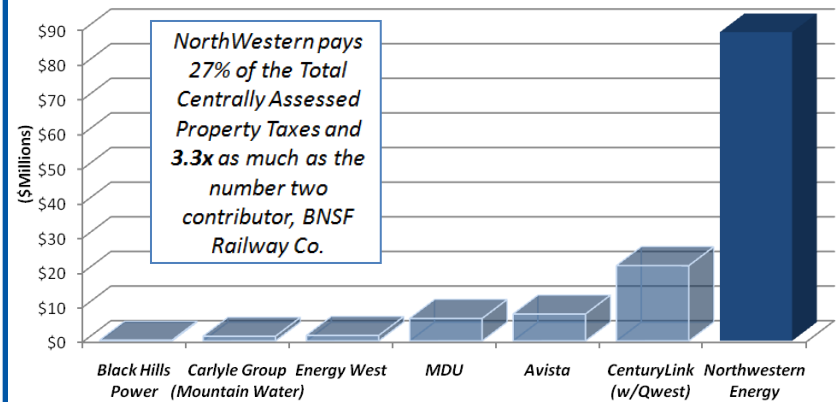
2010 Montana Customers



2010 Montana Rate Base

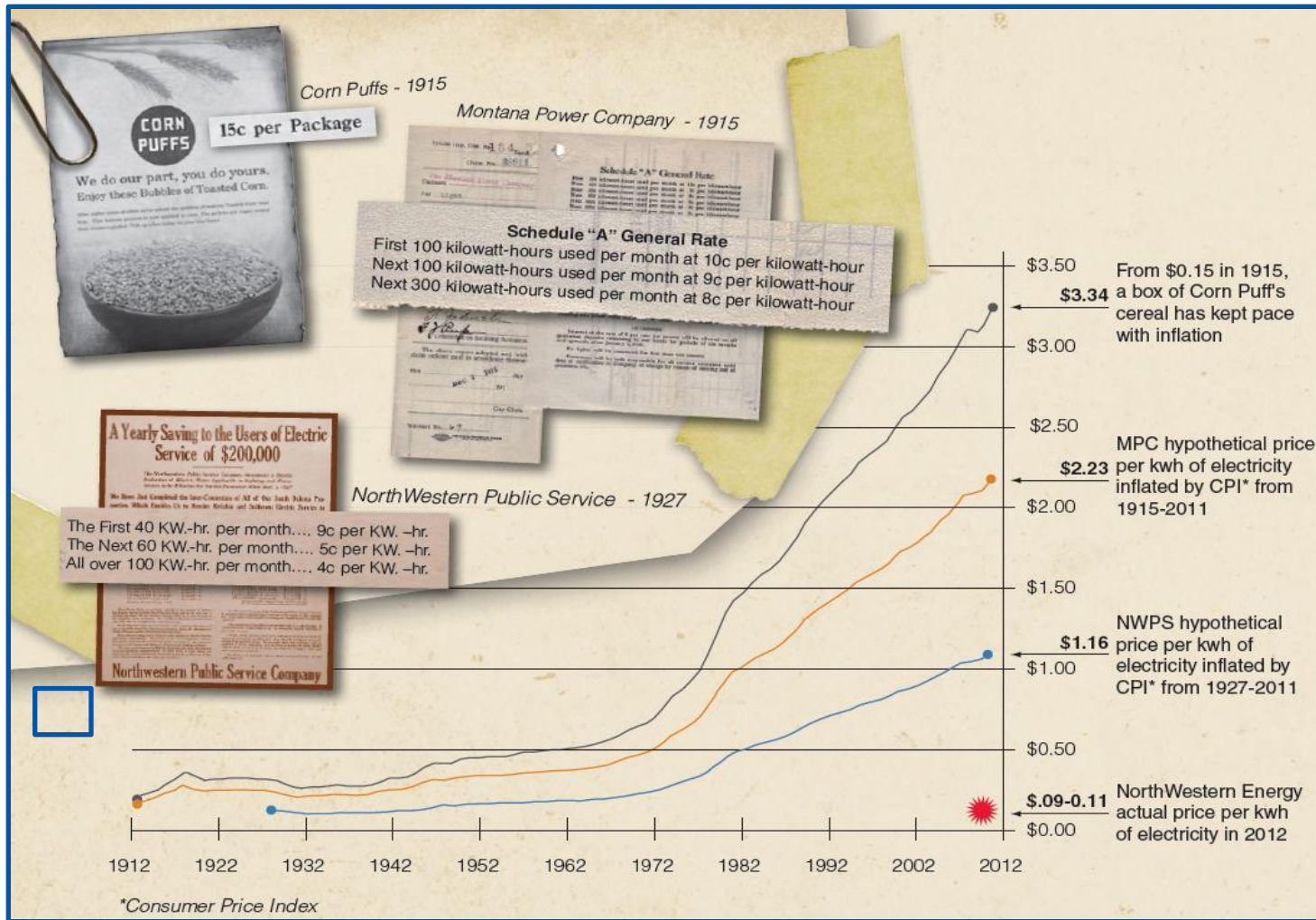


2010 Montana Taxes (Other than Income)



100 YEAR ANNIVERSARY

ELECTRICITY: A GREAT VALUE 100 YRS LATER



OVERVIEW: SUPPLY AND GENERATION



Stable, diverse and reliable electric and natural gas resources for current and future needs

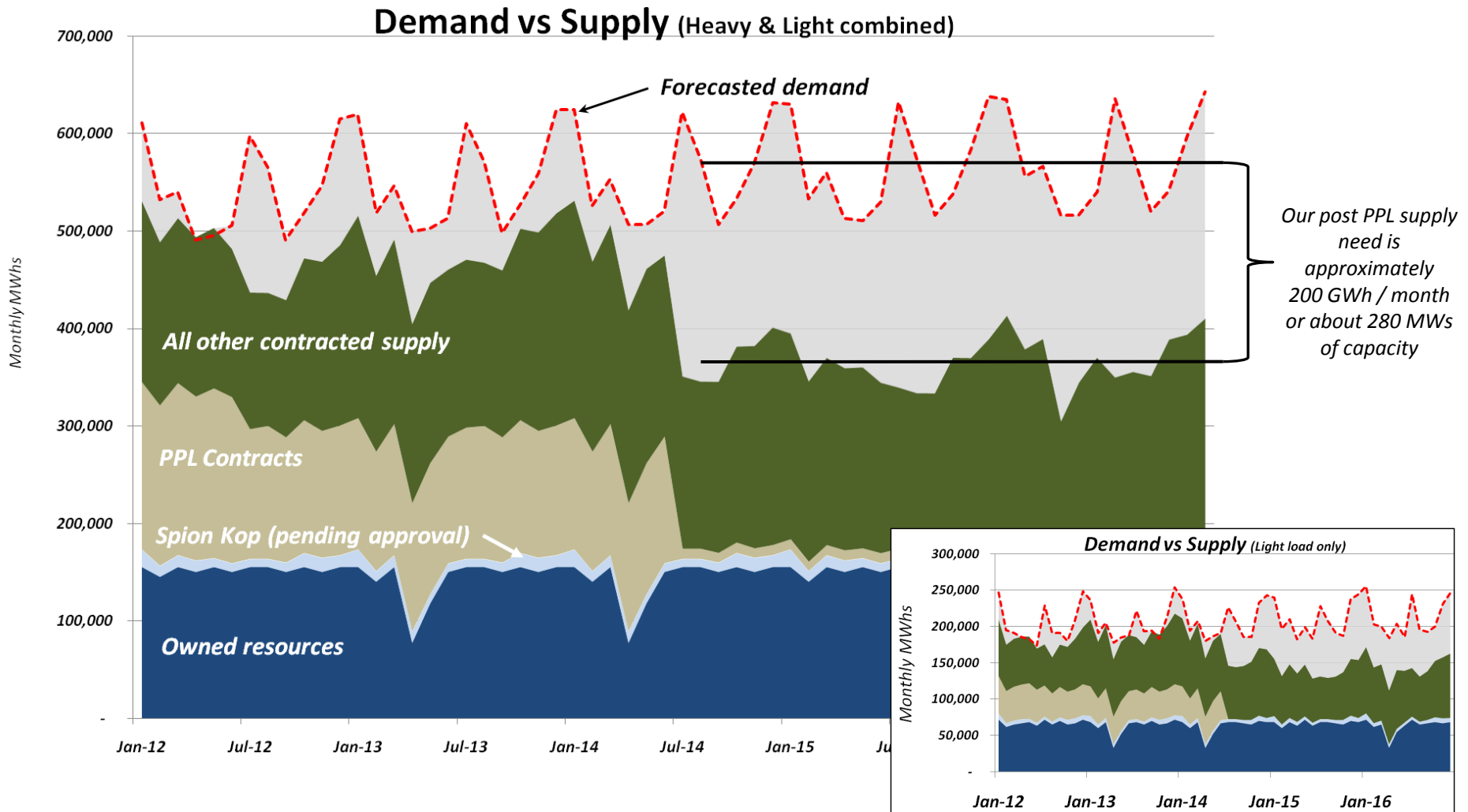


ENERGY SUPPLY

Energy supply – rebuilding a stable portfolio

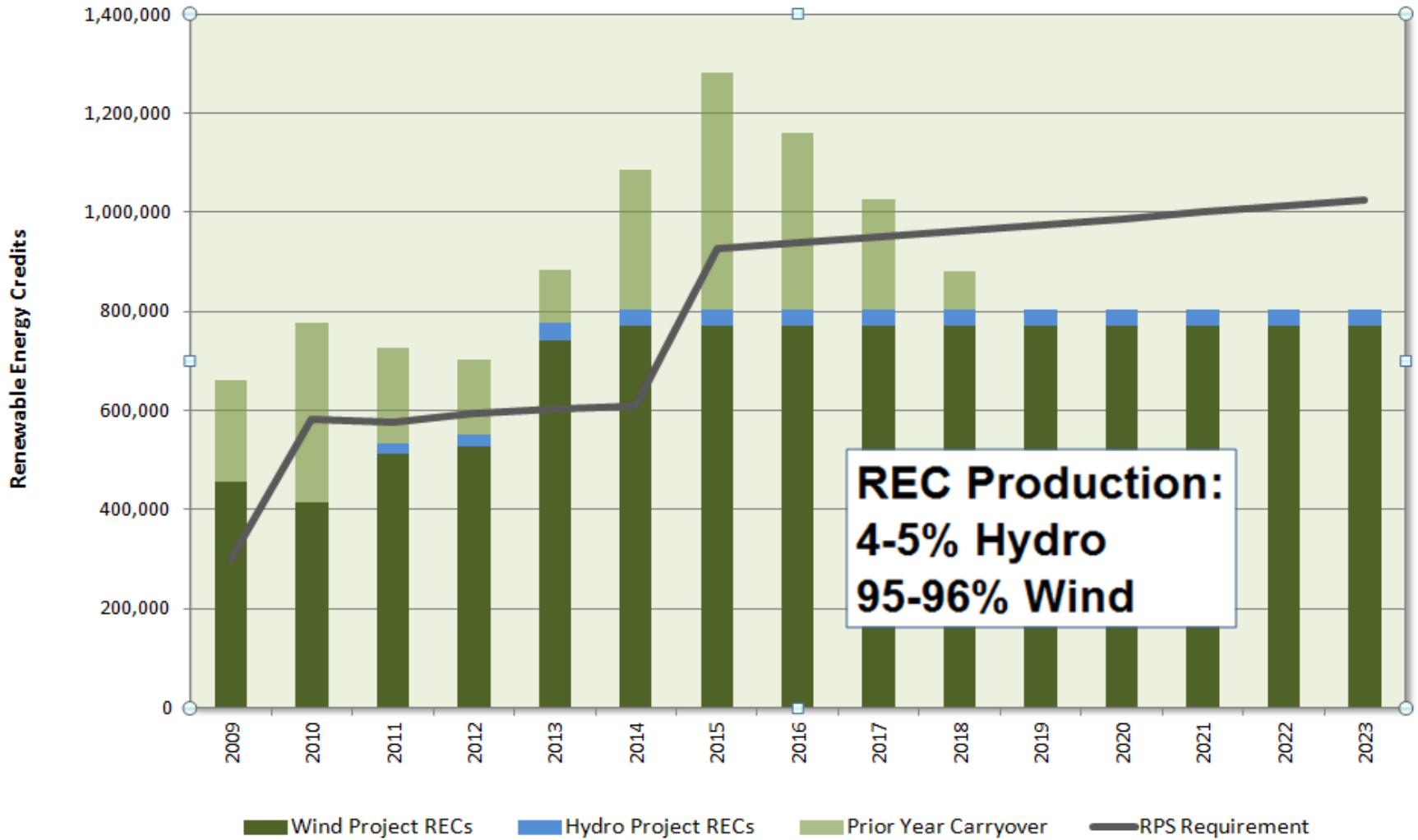
- Portfolio management
- Owned generation – in 3 years, dedicated approximately \$600 million in supply resources to serve MT electric customers
- Energy efficiency and Demand Side Management (DSM)
 - Goal of 6 aMW/year
- Cost-effective renewables (where feasible)
 - Judith Gap – PPA, 135 MW wind facility
 - Spion Kop – Ratebase, 40 MW wind facility
 - Turnbull Hydro – PPA, 13 MW community resource 9/1/11
- PURPA Qualifying Facility resources (as required)
 - 50 MW limit on Wind in Qualifying Facility Tariff (QF-1)
 - PPAs for five wind facilities for approximately 50 MW (total combined capacity)
 - Hydro – PPAs for two hydro facilities for 2.5 MW
 - Desire is for renewable resource diversity
- With these additions - RPS requirements met through 2017

MT BASE LOAD REQUIREMENTS



We are currently evaluating build, acquisition, or other market alternatives to meet forecasted supply gap after PPL contracts expire (75MW in June of 2012 and 200 MWs in June 2014)

NorthWestern Energy RPS Status Forecast



VARIABLE RESOURCE ISSUES

- Regulation
 - DGGs: \$180 mm, built specifically for regulation
 - Remaining capacity to take on new regulation is limited
 - NWE wind capacity (with planned facilities) equal to 1/3 average load
 - Wind at 100% - Resources with limited or no dispatchability is equal to minimum system loads
- Qualifying Facilities - Challenges
 - Operational need for curtailment provisions
 - FERC Policy is clear
 - Montana policy is lagging
 - Interconnection costs, system upgrade costs and required regulation cannot be considered when negotiating long term wind QF contracts
 - Renewable Energy Credits (RECs) can't be considered
 - Obtaining diversity in renewable resource portfolio
 - Meeting Community Renewable (CREP) requirements
- Regulatory Challenges
 - Spion Kop – Performance requirement

SUPPLY PLANNING

- Use a Balanced Approach to Meet Multiple Supply Objectives
 - Resources Must be Cost-Effective and Reliable
 - Supply Diversity (including renewables) is a Goal
 - Changing Needs Require Flexibility
 - Transmission and market initiatives are changing the landscape
 - Resource flexibility is an aid to integrating variable output resources such as wind
 - Manage Different Risks
 - Legislative and regulatory risk (example: cost of carbon)
 - Market price risk
 - Development and operational risk
 - Financial risk

RESOURCE PROCUREMENT PLAN

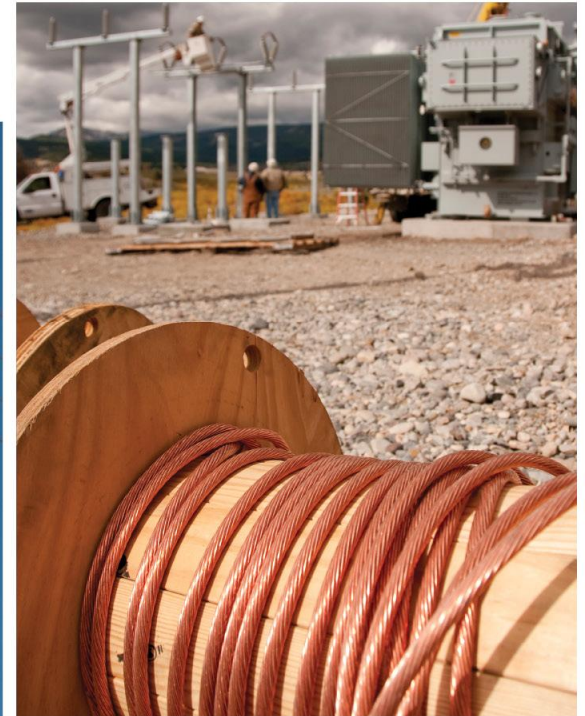
- Filed December 2011
- Major Findings
 - Continue to capture cost effective DSM and work with SBW Consulting (selected to perform a comprehensive DSM program evaluation)
 - Market opportunities remain attractive although risk remains a concern
 - Continue to build an effective portfolio of resources
 - Begin optioning new build
 - Watch for opportunity purchases of existing resources
 - Pursue acquisitions that meet Montana eligibility for RPS
 - Pursue CREP eligible resources
 - Open and transparent acquisition process

REGIONAL PERSPECTIVE

- Observations on Council – Three perspectives
 - Former Council Staff
 - Former Member of the Council
 - Executive of a growing utility
- Key areas of the Council’s work provide value to the region (and even outside the region)
 - DSM Assessment
 - Fuel Price Forecasts (particularly natural gas)
 - Electricity Price Forecast
 - Assessment of resource costs
 - Environmental (carbon) costs
- Caveat: Each utility is different
 - Needs, operations and constraints
- Council must be nimble and be able to react
 - Annual natural gas price forecast would be very useful
 - Address lack of transparency in Resource Portfolio Model
 - Consult with utilities
 - “More usable” results
 - Resource adequacy
 - Effective Load Carrying Capacity (ELCC)



QUESTIONS?



NorthWestern
Energy
Delivering a Bright Future