# An overview of Transmission Open Access & Avoided Cost

## USAD/ARE/ECREEE/ERERA/NARUC May 21, 2013 Commissioner Travis Kavulla Montana Public Service Commission

## The Regulated, Vertically- Integrated Utility



The predominant model since the 1920s.

#### Transmission utilities are monopolies – businesses unlike many others.



## The Monopoly

- A public utility is a corporation "affected with the public interest." Rates must be "just and reasonable."
- Originally the power of the legislature to regulate rates, devolved to state Public Utility Commissions.
- States regulate portion serving end-use customers, the central government regulates "interstate commerce" (i.e. transmission).





Factories

\*

Businesses

Businesses sell their products to multiple customers.

Customers



Allegations of public utilities exercising "Transmission Dominance."

"These are examples of allegations that various public utilities have refused to provide comparable service, either through refusals to wheel, dilatory tactics that so protracted negotiations as to effectively deny wheeling, refusals to provide service priority equal to native load, or refusals to provide service flexibility equivalent to the utility's own use." – FERC



*In most industries, regulation is an act of government that may limit competition or prevent market competition.* 

But in industries where monopolies use market power to stifle competition, regulation is intended to be a substitute for competition, albeit an imperfect one.

# How does the U.S. promote competition in the electric markets?



#### Order 888, issued in 1996 by the U.S. Federal Energy Regulatory Commission

Requires all public utilities that own, control or operate facilities used for transmitting electric energy in interstate commerce:

 To have on file open access transmission tariffs (OATT) that contain minimum terms and conditions of non-discriminatory service, and

"The Commission's goal is to remove impediments to competition in the wholesale bulk power marketplace and to bring more efficient, lower cost power to the Nation's electricity consumers." - FERC





### **FERC OATT schedules:**

**Schedule 1**: Scheduling, System Control and Dispatch **Schedule 2**: Reactive Supply and Voltage Control from Generation Sources

Schedule 3: Regulation and Frequency Response
Schedule 4: Energy Imbalance Service
Schedule 5: Operating Reserve-Spinning Reserve
Schedule 6: Operating Reserve-Supplemental Reserve
Schedule 7: Long-Term Firm and Short-Term Firm
Point-To-Point

Schedule 8: Non-Firm Point-To-Point Transmission

Schedule 9: Generator Imbalance

Schedule 10: Variable Generator Imbalance





#### Content Management

#### **Documents**

#### <u>NAESB Home Page</u>

Standards of Conduct Performance Metric Business Practices, Waivers, and Exemptions ATC Information 2012\_Reg\_Reserves\_Contracts ACE Diversity Interchange (ADI) CPS2 Scores Customer Registration Customer Requested Non-OASIS Transmission Info Daily Resource Undesignations Discussion Papers FERC Order 890 Generation-Load-Transmission Interconnection Load Actual / Forecast Montana Energy Summit April 22 2008 Montana-Idaho Open Season Mountain States 500kV Transmission Intertie MSTI NWMTs Energy Imbalance Prices Network Resource News Northern Tier Transmission Group (NTTG) OASIS Notices Offers to Relieve Congestion Operating Procedures Outages Regulating Reserve Services RFP Schedule 3 Rate Schedule 9 Generation Imbalance Studies (Transmission Service)

Welcome to NorthWestern Energy's OASIS

NorthWestern®

NEWS Announcements can be found under "NEWS" located on the left.

Energy

NorthWestern Energy will be strictly enforcing the timing requirements called out in the Tariff and Business Practices for acceptance of Transmission Service Requests.

NORTHWESTERN ENERGY IS NOT OFFERING ANY DISCOUNTS AT THIS TIME

Further information regarding the replacement regulation service may be found in the "2012\_Reg\_Reserves\_Contracts" folder on the left side of this page.

Due to the termination of the exchange provision of the Montana Intertie Agreement effective October 1 2011, NorthWestern was required to specifically identify a new POR/POD called TOWNSEND on its system. This capacity was previously included in the BPAT.NWMT POR/POD for scheduling purposes. The purpose of this notice is to notify customers that during this transitio Transmission Service Requests (TSRs) to TOWNSEND are subject to senior queued TSRs to BPAT.NWMT that were queued prior to October 1 2011. Once these pre-October 2011 TSRs are clean from the queue, TOWNSEND TSRs will be processed independent from the BPAT.NWMT queue.

> On April 29, 2010, NorthWestern Energy filed a revised Schedule 3 associated with the commercial operation of the Mill Creek Generating Station, which can be found under the Tariffs / Service Agreements FERC Filings folder.

NWPP Reserve Sharing settlement pricing are available at www.nwpp.org, on the right hand screen under "Reserve Sharing".

### *Making "open access" meaningful* Feed-in Tariff

- ✤ A "feed-in tariff":
  - Policy focused on supporting the development of new renewable energy projects by offering long-term purchase agreements for the sale of renewable electricity
  - Purchase agreements typically offered within contracts ranging from 10-25 years, for every kilowatt-hour of electricity produced
  - Payment levels offered for each kilowatt-hour can be differentiated by technology type, project size, resource quality, and project location to better reflect actual project costs.
  - Successful feed-in tariff policies typically include three key provisions: (1) guaranteed access to the grid; (2) stable, longterm purchase agreements (typically, 15-20 years); and (3) payment levels based on the costs of RE generation



Some have advocated feed-in tariffs that pay a bonus or premium. This leads to higher rates, and an overcharge to consumers above what they would have paid but for the feed-in tariff.

Instead of a subsidy, many states seek a neutral price point so that smaller generators, often renewables, can compete against larger generators.



✤ "Avoided cost" ratemaking

allows small generators to access retail customers otherwise help captive by the incumbent utility. Sales of energy and capacity are at "avoided cost" when those generators are paid what the utility otherwise would have had to pay to obtain other energy or capacity supply.





- In the United States, "avoided cost" ratemaking has its genesis in the Public Utilities Regulatory Policies Act of 1978.
- Most states have proceedings to determine avoided cost.
- Typically, a utility specifies a "marginal resource" that acts as the threshold for avoided cost.







How are the two the same? How are they different?

In Montana, a natural gas generator is expected to cost about \$200 million. It produces both energy but it also has capacity value; it can be turned off and on at will. Wind produces energy, but does not have capacity value.

#### RATE for Qualifying Facility, QF, Power Purchases:

Non-wind installations		Wind Installations
Off-Peak Hours: – <i>\$46.97</i>	VS.	\$46.97
On-Peak Hours: – <i>\$86.56</i>	VS.	\$52.33

 QFs who are able to make their projects work at the avoided-cost rate are eligible for long-term power purchase agreements that the utility must sign and the government guarantees through the regulator.

