2014 U.P. Energy Summit

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we energies

Topics

- History of power generation in the Upper Peninsula
- Background on single-system approach
- Current challenges
- Moving forward

History of power generation in the Upper Peninsula

- Vast majority of generation in U.P. was “customer-owned” generation
- Municipal utility generation operated as “islands” to meet individual community energy needs
- Limited coordination among customer-owned generation and the surrounding transmission system

More than 70% of U.P. generation was originally built by companies to self-serve their own energy needs

History of Presque Isle Power Plant 1955-1979

- **The only large, coal-fueled generating facility in the U.P.**
- **Constructed and owned by Upper Peninsula Generating Company**
  - First 25 MW went into service in 1955
  - Cliffs owned 90% of Upper Peninsula Generating Company
  - 600 MW were added between 1962-1979 to match Cliffs growth

History of Presque Isle Power Plant 1980's

- **Iron-ore mining nearly ended in the U.P.**
  - Inflation
  - High-interest rates
  - Low-cost imported ore
  - Cliffs customer/partner bankruptcies
- **Cliffs executed its business plan during a challenging economic environment**
  - Partner buyouts required cash
  - Divesture of non core assets

Wisconsin Electric agreed to purchase PIPP from Cliffs in 1988

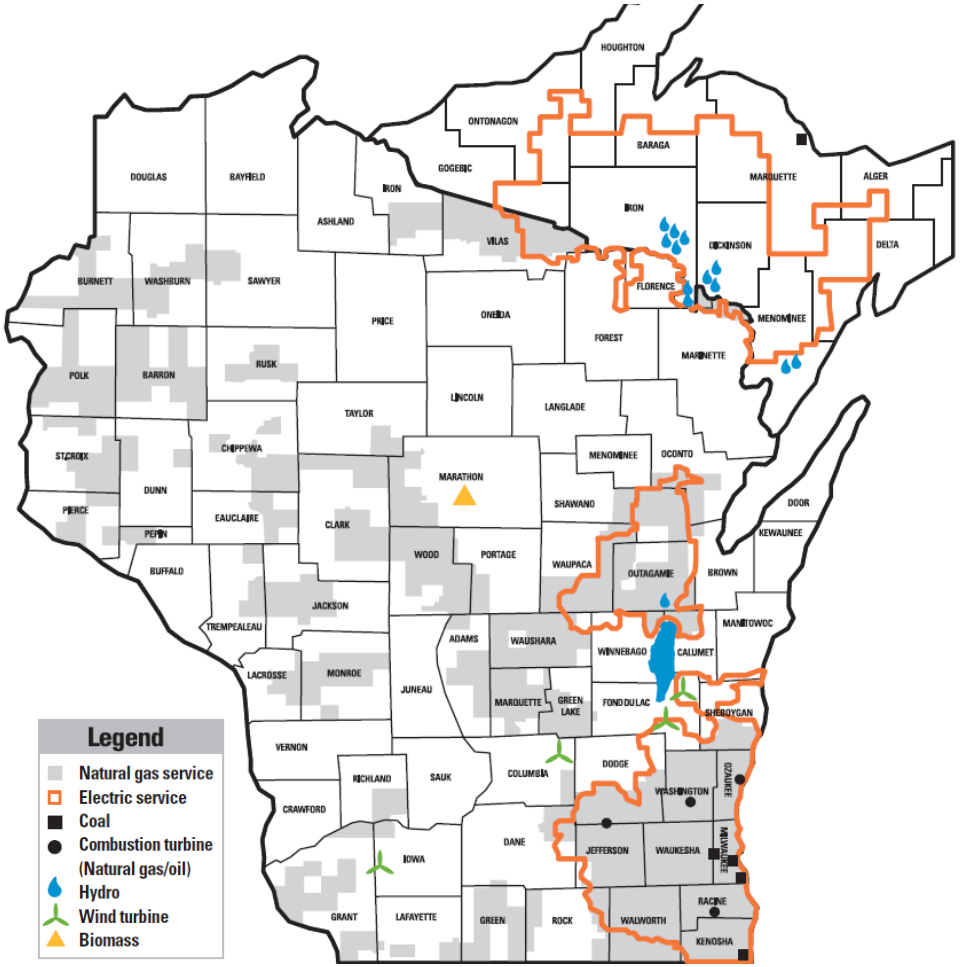
Sale of Presque Isle – 1988

A good solution for both Michigan and Wisconsin

- **Cliffs**
  - $250 million cash infusion from Wisconsin Electric
  - Immediate reduction in energy costs
  - Special contract --15% less than former self-serve costs
  - Lowest electric rates on Wisconsin Electric system
  - Maximum of 300 hours per year curtailment
- **Wisconsin Electric**
  - Plant allowed company to meet demand across system
  - Purchased power was expensive and limited
  - Conservation and demand management was not enough
  - Natural gas for peaking plants was scarce
- **Wisconsin Electric invested to strengthen the "single-system" operation between the two states**

Single-system approach to Michigan and Wisconsin

- System is planned and operated as a “single system”
- “Slice of system” cost allocation between states worked well for decades
- Allocators historical/current
  - Michigan 7.0% -> 1.85%
  - Wisconsin 86.0% -> 90.4%
  - Wholesale 7.0% -> 7.75%
- Michigan customers pay a <u>small slice</u> of the total generation/production system costs



System investments since 2003

- **Nearly $4 billion in generation investments**
  - $170 million invested at Presque Isle
- **Negotiated Joint Venture with Wolverine Power in November of 2012**
- **Wolverine would have made $140 million investment to add environmental controls at Presque Isle**
- **Loss of load in 2013 due to Customer Choice**
- **Cancelled joint venture in order to downsize supply portfolio**

Service Arrangement with Cliffs

- **Special contract with Cliffs from 1988 to 2007**
  - Two decades of very favorable electric rates -- lowest rates on the system
- **Cliffs began to take tariffed service in 2008 based on allocated costs**
  - Tariff rate was 4.5 cents/kwh; former contract rate was 4.3 cents/kwh
  - Tariff rate at time was still 32% lower than average industrial rate in the lower Peninsula and 27% lower than Wisconsin

Challenge to "slice of system"

- **Cliffs and other Michigan customers challenged slice of system**
  - **Wanted to:**
    - Exclude all fixed costs of new gas fueled and coal generation in Wisconsin
    - Remove costs of new renewable facilities built in Wisconsin
    - Remove costs of environmental compliance in Wisconsin
    - Include benefits from being part of the system—Point Beach credits, system energy
- **MPSC affirmed slice of system approach**
  - Commission Orders in 2010 and 2012 (U 15891 and 16830)

What changed in the U.P. last year ?

- **Michigan customer choice law changed in 2008**
  - Customer Choice results in a 90% cap in Wisconsin Electric's service territory while there is a 10% cap elsewhere in Michigan.
- **Some customers began to view the MISO market as an attractive option**
  - Purchase electricity in the spot market
  - Little market risk
  - Push reliability costs to remaining customers
- **The first alternative supplier arrives in Wisconsin Electric service territory in 2013**

Mines and others announce switch to an alternative energy supplier

- **Cliffs and other customers switch to AES**
  - Cliffs alone represented more than 80% of sales in Michigan
  - In less than 3 months, nearly 88% of Michigan sales went to AES
  - Joint Venture with Wolverine ended due to loss of load

THE MINING Journal

Cliffs pulls plug on We Energies: Deal to buy power for mines from Integrys

August 1, 2013

KYLE WHITNEY - Journal Staff Writer (kwhitney@miningjournal.net) , The Mining Journal

Save |

MARQUETTE - Driven by rising electric costs, Cliffs Natural Resources is opting to change the power supply company for the area's Empire and Tilden mines.

Beginning Sept. 1, the two mines will no longer be customers of Wisconsin's We Energies and will instead receive electricity from Chicago-based Integrys Energy Services Inc.

The decision to switch electric providers was a purely economic one, according to Cliffs spokesman Dale Hemmila.

Current realities

- **PIPP is essential to maintaining reliability of the U.P.**
- **AES customers in the U.P. are no longer required to pay <u>any</u> portion of traditional "slice of system" costs**
- **AES customers in the U.P. avoid paying any costs to operate Presque Isle despite it being needed for reliability**

Choice customers are insulated from the reliability and cost consequences of their decision to switch.

Protect Remaining System Customers

- **MISO concludes PIPP needed to maintain reliability in the U.P. as a whole**
- **MISO obtains FERC approval of a System Support Resource (SSR) Agreement for Wisconsin Electric to operate PIPP**
  - Approved April 2014
  - Agreements expected to extend several years
- **Allocation of SSR payment is being disputed**

SSR Agreement protects Wisconsin and Michigan customers who remain on the system

Impact of SSR on 2015 System Rates

- **Step 1 – Credit all SSR revenues to system customers**
- **Step 2 – SSR costs allocated to system and non-system customers based on FERC approved allocators**

Net impact on system customers is a credit equal to SSR costs that are allocated to non-system customers

Impact of SSR on System Rates in 2015

Impact of SSR on rates			
System Customers			
SSR Revenues	$ (96.0)	credit to costs - 100% to system customers	
Allocation of SSR Costs	17.2	17.9% of SSR Costs	
Net Impact to System	$ (78.8)		
Allocation of Net Impact to System Customers			
Wisconsin retail	$ (71.2)	90.4% of Net System Impact	
Michigan retail	(1.5)	1.85% of Net System Impact	
Wholesale	(6.1)	7.75% of Net System Impact	
	$ (78.8)		
Non-System Customers			
SSR Revenues	$ -	All SSR revenues go to system customers	
Allocation of SSR Costs	78.8	82.1% of SSR Costs	
	$ 78.8		

SSR Allocators

	With Abeyance	MISO Dec 1	Our Proposal
System	**75.7%**	**13.6%**	**17.9%**
AES Customers	6.4%	54.4%	71.7%
Cloverland	2.7%	22.6%	0.0%
All other	15.2%	9.4%	10.4%
Non-System	**24.3%**	**86.4%**	**82.1%**
Total	100.0%	100.0%	100.0%

Moving forward
Our perspective

Who should pay for continued operation of PIPP?

- **Electric consumers should bear costs in proportion to the benefits they receive**
  - Consistent with long-standing regulatory principles
- **Any solution must be fair to Michigan and Wisconsin customers**
- **The Wisconsin and Michigan commissions' traditional approach to allocate costs is broken**
- **MISO's current method to allocate SSR costs by Load Balancing Authority (LBA) is not correct**

Closing Thoughts

- **Unique circumstances brought us here**
  - Single-system planning across two states
  - Customer choice (90% for Wisconsin Electric in Michigan – 10% elsewhere in Michigan)
  - A single plant is needed to maintain reliability in one state and not the other
- **Complications and uncertainties abound**
  - SSR cost allocation is complex - involves many parties and multiple regulators
  - New generation in the U.P. will take time
  - Single operating company structure

Closing Thoughts
Our View on Solutions

- **Near term**
  - Mitigate impacts on Michigan customers while treating Wisconsin customers fairly
  - FERC must get SSR allocations right
- **Long term**
  - New generation in the U.P.
  - Wisconsin Energy is willing to invest in generation
  - Contracts with large customers will be required