

The Lone RPS in Michigan

LMOP Conference
January 13, 2009



Lansing Board of Water & Light

- The (BWL) is a municipal utility owned by the citizens of Lansing
- Largest municipally-owned electric utility in Michigan and among the 35 largest in the U.S. (96,380 customers)
- Largest groundwater system in Michigan (54, 840 customers)
- Also serve the Lansing downtown district with steam heating and chilled water

Utility Facilities

- **The BWL owns and operates:**
 - Seven pulverized coal-fired electric generating units
 - Two drinking water conditioning plants
 - Four steam stoker units
 - One chiller plant
- **Ownership interest in Detroit Edison's Belle River Plant**

BWL Renewable Energy History

- **GreenWise renewable energy program launched in 2001**
 - Packaged in 250 kWh blocks
 - Cost is \$7.50 per block per month
- **GreenWise Renewable Energy Sources**
 - .5 MW of hydro
 - .5 MW of landfill gas from Granger
 - Contracts expired in 2006

Reasons for BWL to adopt an RPS

- **Prudent to pursue renewable options to better serve our customers**
 - Satisfy customer interest in renewable energy
 - Help manage future air emission regulations
- **Internal Integrated Resource Plan (IRP) recommended ownership or long term power purchases from renewable power projects**

Reasons for BWL to adopt an RPS

- **PURPA amendments under EPCRA 2005 requires utilities to consider:**
 - **Minimizing dependence on one fuel source**
 - **Ensure that electric energy is generated from diverse range of fuels and technologies (which includes renewable technologies)**

RPS Hurdles

- **Renewable Energy costs more**
- **Renewable Energy typically requires long term contracts**
- **No legislative or regulatory requirement to pursue renewable energy**
- **Future RPS requirements, if any, may not match an internal RPS**
- **Renewable Energy Capacity Factor**

RPS Approved by Board of Commissioners

- **January 23, 2007 the BWL Board of Commissioners unanimously approved a renewable energy policy**
- **First RPS in the state of Michigan**

RPS Targets

- This policy states that the BWL shall strive to generate or purchase electricity generated from eligible renewable energy sources at the following target levels:
 - Two percent (2%) of electric retail sales (kWhs) by December 31, 2008;
 - Five percent (5%) of electric retail sales (kWhs) by December 31, 2012;
 - Seven percent (7%) of electric retail sales (kWhs) by December 31, 2016

Recent RPS Initiatives at the BWL

- **Renewed hydro supply contract**
- **Refurbished one wheel of the 100+ year old BWL Hydro at our Moore's Park plant**
- **Installed largest solar array in Michigan**
- **Most significantly: Partnered with Granger Electric for the long term purchase of landfill methane gas produced energy**

Granger Partnership

- Long-term power purchase agreement
- Power sources from two existing landfill facilities
- Renewable energy credits supplied along with power
- Begins at 4.8 MW's of capacity and increases to over 12 MW's

Benefits of Granger Partnership

- **Historical reliability approximately 98%**
- **Capacity Factor approximately 95%**
- **Competitive price compared to other new renewables**
- **Direct interconnection with Lansing's distribution system, eliminating transmission complexities and costs**
- **Granger has an outstanding reputation not only as a company but as experts in landfill gas energy**

Michigan RPS Today

- **October 2008 legislature passed Public Act 295**
- **RPS requires 10% by 2015**
- **Energy Optimization component**

Thank You

