

Manitoba Hydro Undertaking #57

What was MISO’s natural gas generation back in 2008, 2009 and 2010, as well as forecast for the next few years (if available) what was the amount generated by way of GWh and what percent of capacity that represents in the MISO region.

For 2008, the installed capacity of generation resources within the MISO market footprint totaled about 129,000 MW at year end and the total annual generation was 560,800 GWh. The breakdown by installed capacity and annual generation is as follows:

2008		
Resource Fuel Type	Percent of Installed Capacity	Percent of Annual Generation
Coal	52.0%	81.2%
Natural Gas	28.0%	3.9%
Nuclear	7.3%	12.1%
Wind	3.0%	0.6%
Other	<u>9.7%</u>	<u>2.2%</u>

For 2009, the installed capacity of generation resources within the MISO market footprint totaled about 137,000 MW at year end and the total annual generation was 581,900 GWh. The breakdown by installed capacity and annual generation is as follows:

2009		
Resource Fuel Type	Percent of Installed Capacity	Percent of Annual Generation
Coal	52.0%	77.9%
Natural Gas	28.0%	2.6%
Nuclear	7.0%	14.1%
Wind	5.1%	2.7%
Other	<u>7.9%</u>	<u>2.7%</u>

For 2010, the installed capacity of generation resources within the MISO market footprint totaled about 146,000 MW at year end and the total annual generation was 641,400 GWh. The breakdown by installed capacity and annual generation is as follows:

2010		
Resource Fuel Type	Percent of Installed Capacity	Percent of Annual Generation
Coal	49.9%	76.4%
Natural Gas	28.8%	3.9%
Nuclear	7.2%	14.5%
Wind	5.4%	3.7%
Other	<u>8.7%</u>	<u>1.6%</u>

Note that year over year installed total generation capacity and energy estimates may not be directly comparable due to changes in the MISO market footprint resulting from the addition of new MISO members. The annual generation estimate was derived from MISO records of the total monthly real-time committed generation by fuel type. Other resource fuel types include hydro, biomass, oil and pet coke.

MISO does not, as far as Manitoba Hydro is aware, produce forward looking reports on the expected generation by source of energy. Therefore, a forecast of natural gas generation for the next few years cannot be provided.