Marmora Pumped Storage—Hydro Power

**From an Open Pit Iron Mine...**

- **Highways and properties.**
- **70 million tons of waste rock pile (12 stories high) is infertile and very visible from nearby.**
- **300 jobs lost when the mine operation closed.**
- **Open pit is over 200 metres (700 ft) deep. That’s 4 times the drop of Niagara Falls.**
- **(area equivalent to 7.5 Rogers Centres).**

**...To a Major Electricity System Asset...**

- **Economic:** Makes use of existing man-made infrastructure from three decades of mining.
- **Versatile:** Stores surplus power for use when the power is needed.
- **Roaming:** Pumped storage sites in Europe are significant:
  - Operational: 1978
  - Size: 1,600 MW
  - Tennessee, USA
  - Operational: 1984
  - Size: 1,800 MW
  - Gwynedd, Wales, UK

**To an Economic Development Engine for Eastern Ontario...**

- **• Area mining history and interpretive eco-tourism opportunities for the area**
- **• Education and training partnerships with area colleges and universities**
- **• Tourism employment and related revenue**
- **• 45 full and part-time jobs**
- **• 800+ engineering and construction jobs**
- **• $700 million private sector investment**

**As a Result,** it is cheaper than wind, solar and infrastructure from three decades of mining.

**In Modern Facilities**

- Pumped storage is a "closed system" to store and generate electricity.
- Water is moved between upper and lower reservoirs in response to daily power demand, helps balance the power is needed, provides instantaneous response to daily power demand, helps balance the power is needed, provides instantaneous response to daily power demand, helps balance the power is needed, provides instantaneous response to daily power demand, helps balance the power is needed, provides instantaneous response to daily power demand, helps balance the power is needed, provides instantaneous response to daily power demand.

**The Marmora Pumped Storage Design**

- **Approximately 3 Rogers Centres in volume of water is pumped up to the reservoir and released down to the lower reservoir during the day to generate power above is a concern.**

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