REGULATED HYDROELECTRIC OPERATIONS OVERVIEW

Briefing – Participants in OEB Consultation

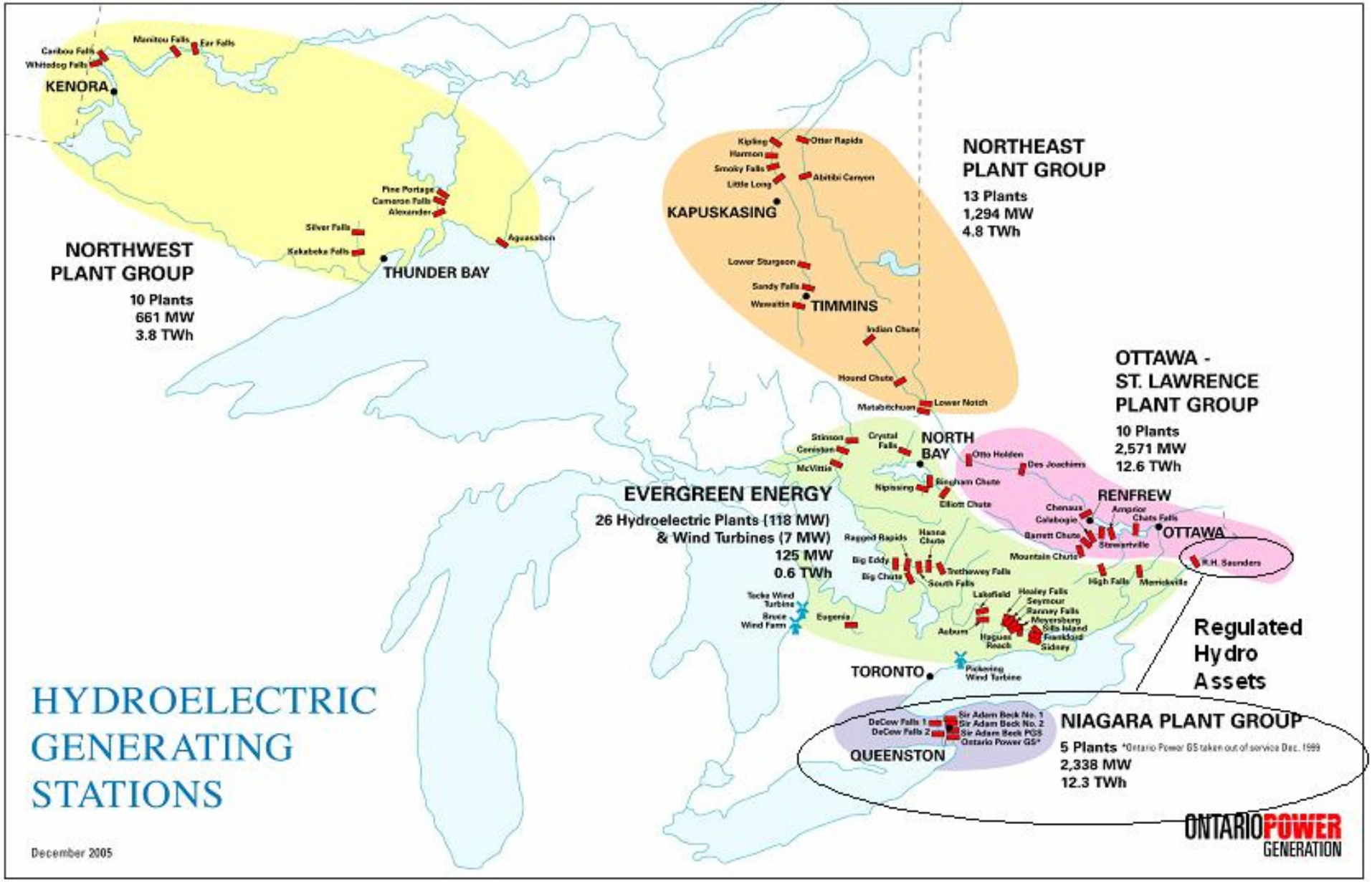
May 19, 2006

ONTARIO POWER GENERATION

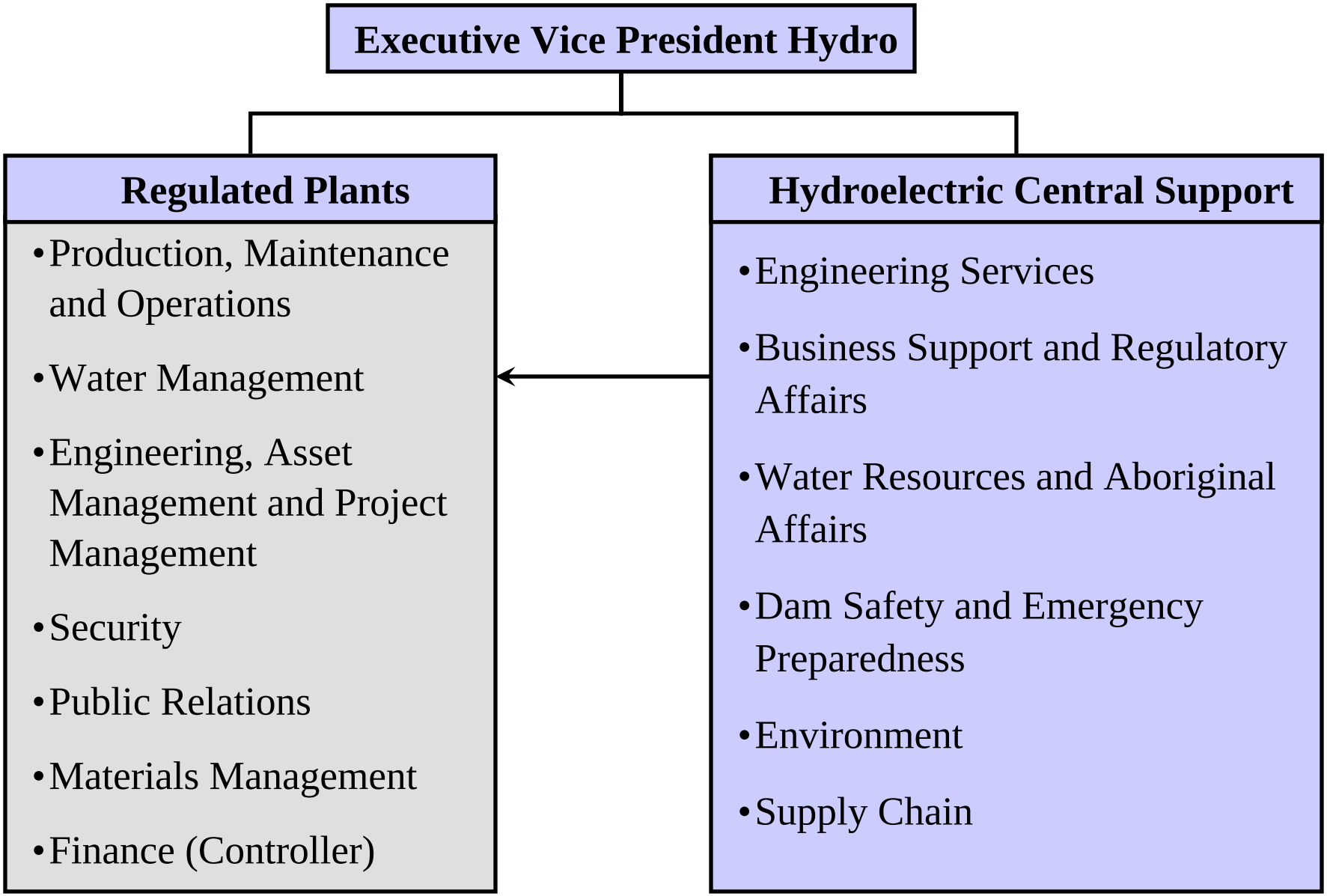
Agenda

- OPG Hydroelectric Organization
- OPG Hydroelectric Business Plan
- Key Issues and Risks

Hydroelectric Station Map



Organization - Regulated Plants and Hydroelectric Central Support



Regulated Hydroelectric Facilities - Summary

PLANT	No. of Units	Age In 2005 (Years)	Capacity (MW)	30 Yr Avg Energy (TWh)	Capacity Factor (Avg)
Decew Falls 1	4	107	23	0.1	56
Decew Falls 2	2	61	144	1.0	83
Sir Adam Beck 1	10	83	498	2.3	53
Sir Adam Beck 2	16	51	1,499	9.5	72
Sir Adam Beck PGS	6	48	174	-0.1	8
Total Niagara Plants	**38**		**2,338**	**12.8**	**63**
R.H. Saunders	16	47	1,045	6.9	75
Total Regulated Plants	**54**		**3,383**	**19.7**	**66**
CNP/Fortis Payback & NYPA Water Transfers				-0.5	
Total Regulated Plants (After Payback & Transfers)				**19.2**	

Other Assets/Infrastructure

- 19 dams and 13 special purpose structures
- Joint Works with New York Power Authority for Sir Adam Beck and Saunders (eg, control dams, main earth dykes, ice booms, some access roads, some bridges, Niagara River Control Centre, etc)

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Niagara – Sir Adam Beck (SAB) Complex

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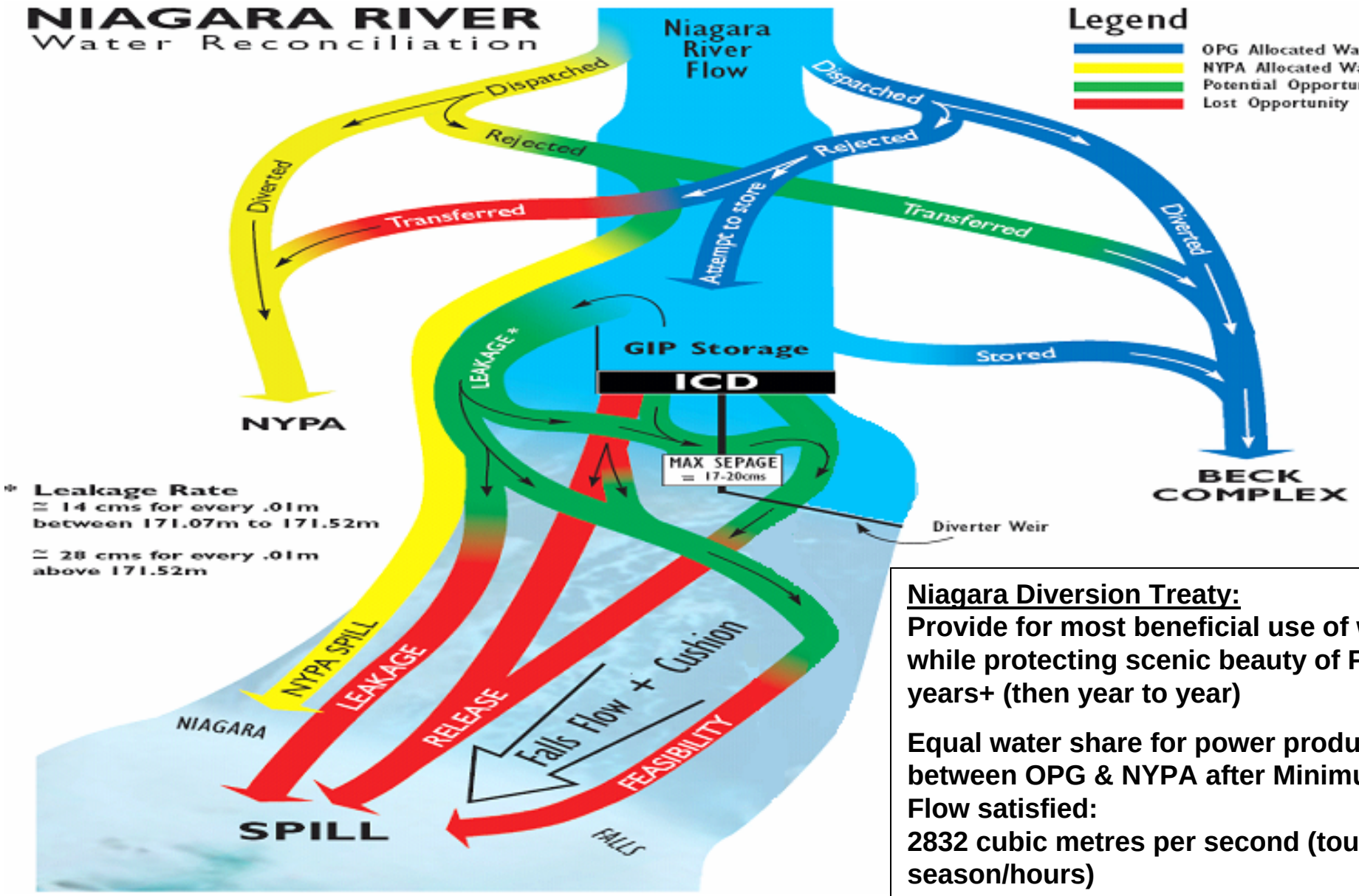
Niagara River Diversion - Operations



Niagara Diversion Treaty:

Provide for most beneficial use of waters while protecting scenic beauty of Falls. 50 years+ (then year to year)

Equal water share for power production between OPG & NYPA after Minimum Falls Flow satisfied:
2832 cubic metres per second (tourist season/hours)
1416 cubic metres per second (non-tourist season/hours)

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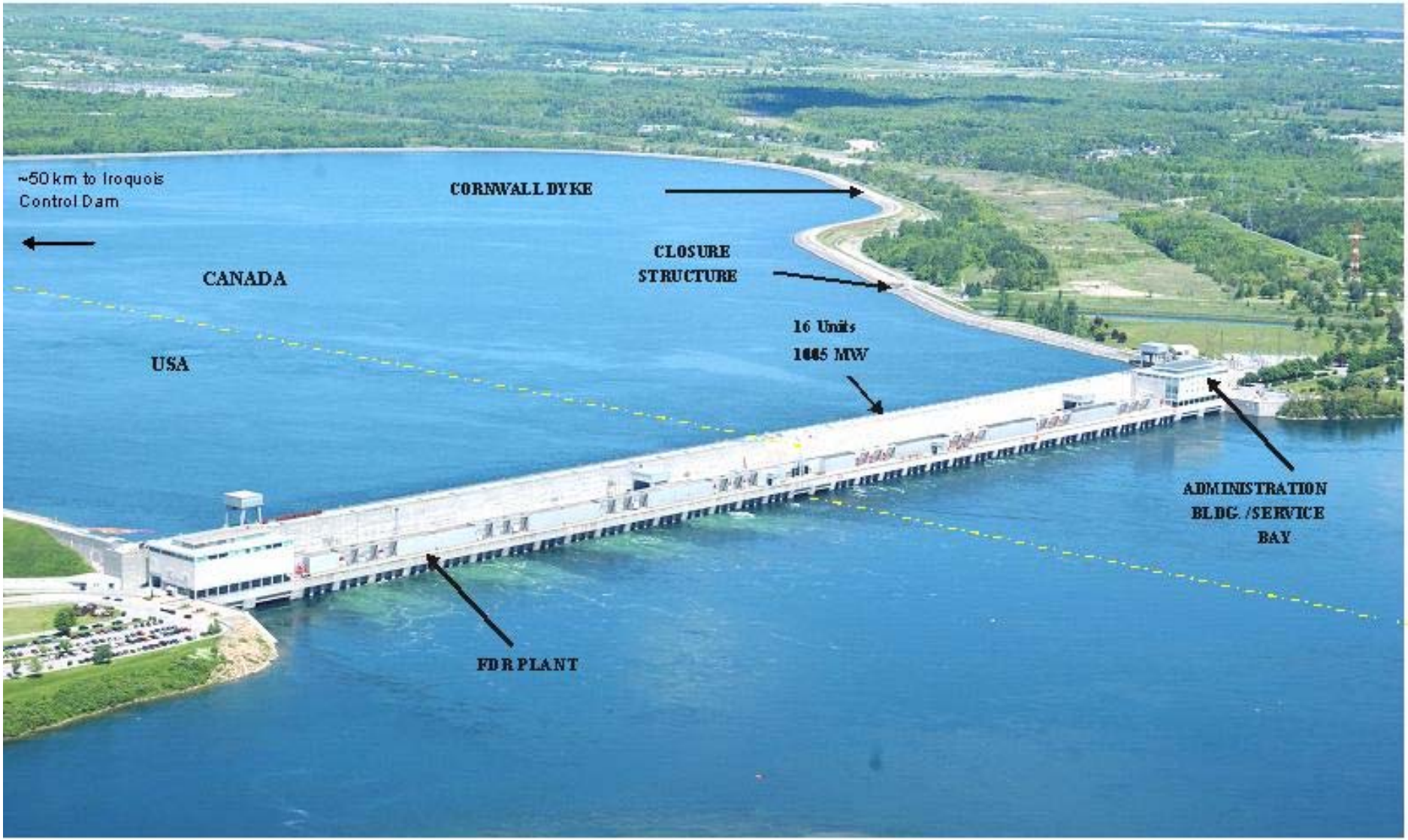
R. H. Saunders GS



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Hydroelectric Business Plan Objectives

- ✓ Sustain, maintain and improve the assets
- ✓ Generate electricity as efficiently and cost effectively as possible
- ✓ Continue to achieve top quartile performance or better in areas of OM&A cost per MWh and availability
- ✓ Expand, develop and/or improve capacity and production where feasible (per Memorandum of Agreement with Shareholder)
- ✓ Achieve above objectives within the legislative and regulatory framework of the Province and Government of Canada (includes legislation and agreements with other provinces and US)

Major OM&A and Capital Expenditures (2006 & 2007)

- **Niagara Tunnel - Continue construction of tunnel**
- **Sir Adam Beck (SAB) 1 – Convert 25 Hz units to 60 Hz (start with Unit 7 in 2007). Start turbine runner model testing in 2006**
- **SAB 1 - Start planning for major rehabilitation/upgrade of Unit 9**
- **New Niagara Operations Centre (2006/2007)**
- SAB 2 - Repair surface air coolers and operating ring plastic bearings. Monitor wicket gate operation/bearings
- SAB PGS – Repair rotor arm spider cracking and replace main output transformers (all units)
- Decew Falls 1 & 2 – Major overhauls started 2005 and to be completed by 2007
- Decew Falls 2 - Replace headgates and generator cables
- Saunders GS – Replace selected Protection and Control equipment, replace HVAC system, repair all cranes, grout various joints in powerhouse structure (ongoing due to concrete growth problems)

Major Risks

Production Forecast

- Water availability can vary significantly from year to year (beyond OPG's control)

Plant and Infrastructure Rehabilitation Costs

- SAB 1 conversion and rehabilitation costs (25 Hz units, Unit 9, etc)
- SAB 1 canal rehabilitation (cost and outage losses)
- SAB PGS dyke grouting (cost and technical success)
- SAB PGS equipment reliability
- Saunders future "concrete growth" rate (ie, equipment reliability issues associated with concrete growth, re-slotting required sooner than presently anticipated)
- Joint Works unforeseen costs or advancement of projects/costs by NYPA (eg, Barnhart Island Bridge)

Niagara Tunnel

- Cost risk associated with unforeseen underground conditions
- Schedule risk associated with delays in tunnel advancement/in-service

First Nation Issues

- First Nation grievance/land claim (at Saunders)

Environment

- American Eel issue at Saunders (Impact on costs and possibly production)
- DeCew Falls - Lake Gibson Contamination (environmental provision)