NUCLEAR

OPERATIONS OVERVIEW

Briefing – Participants in OEB Consultation

May 19, 2006

ONTARIO POWER GENERATION

Agenda

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

Nuclear Generating Stations

Pickering A & B

Pickering A

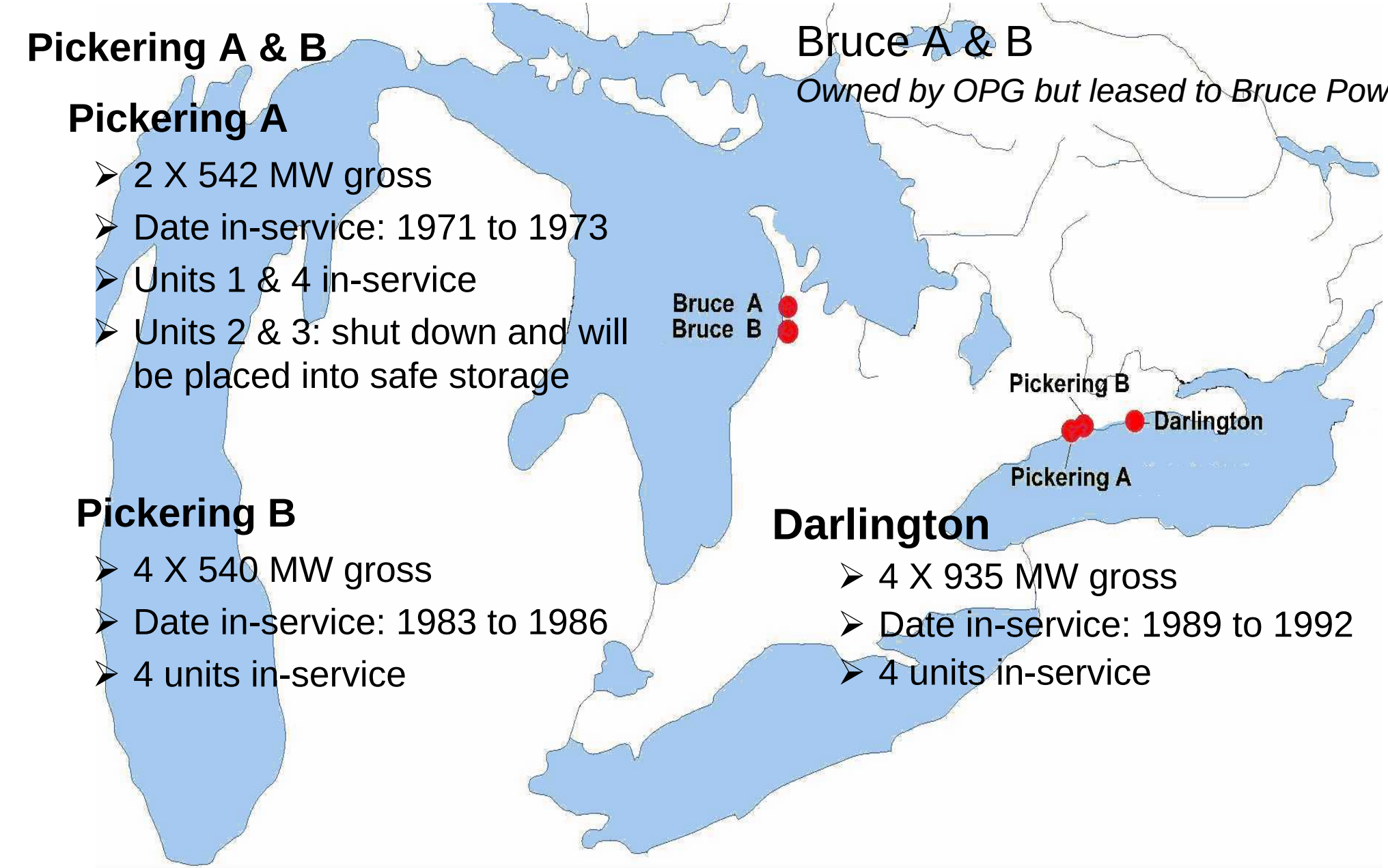
- 2 X 542 MW gross
- Date in-service: 1971 to 1973
- Units 1 & 4 in-service
- Units 2 & 3: shut down and will be placed into safe storage

Pickering B

- 4 X 540 MW gross
- Date in-service: 1983 to 1986
- 4 units in-service

Bruce A & B

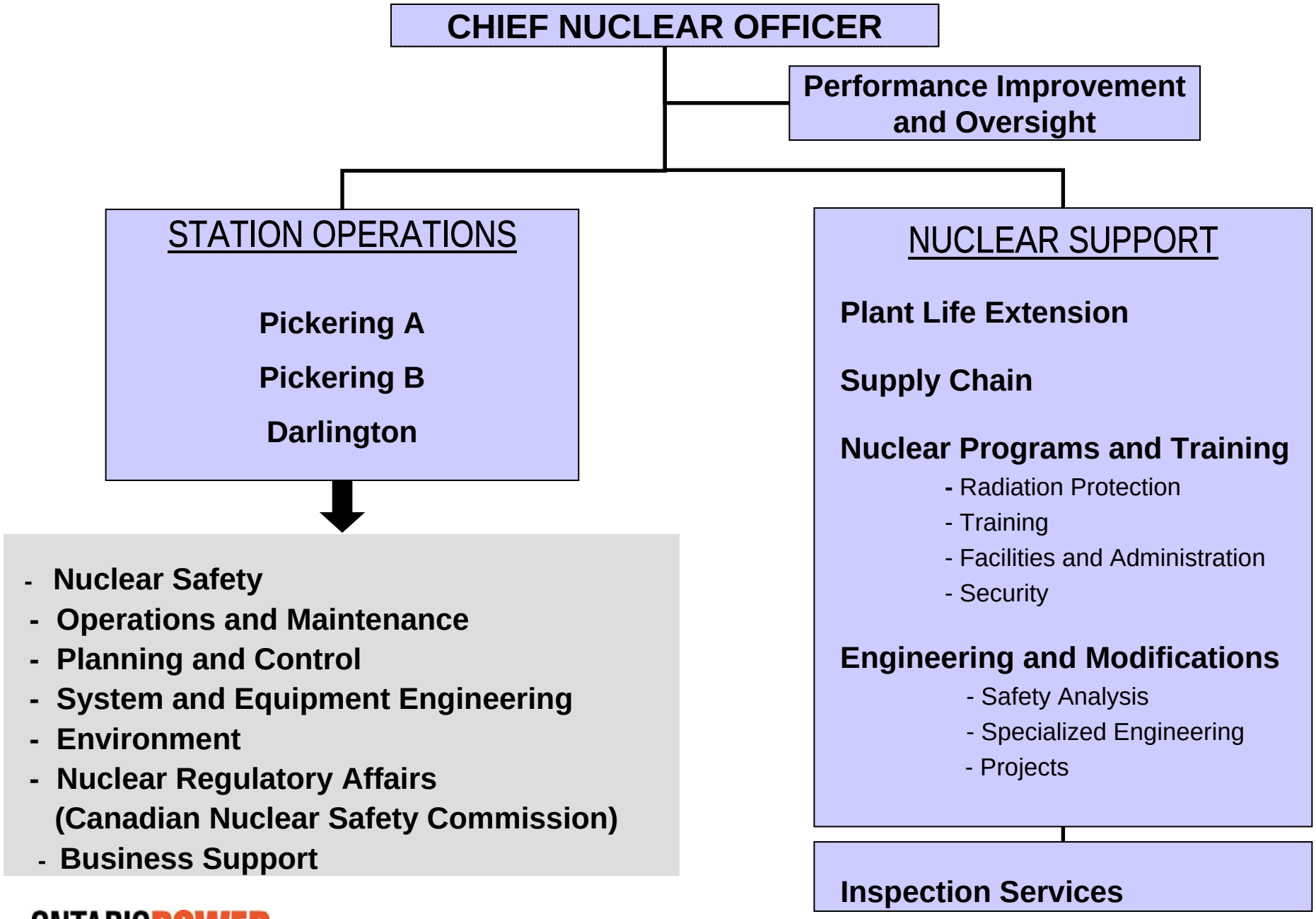
Owned by OPG but leased to Bruce Power



Darlington

- 4 X 935 MW gross
- Date in-service: 1989 to 1992
- 4 units in-service

Organization



ONTARIO POWER GENERATION

Business Plan – Generation

Generation output is based on currently known scope of outage work, plant condition assessments and projected unit reliability. Fleet risks such as technological discoveries make precise forecasting difficult.

TWh	**2005**	**2006**	**2007**
2005 Plan	**45.2**	**50.6**	**53.0**
2006 Plan	*Actual*		
Pickering A	3.7	7.0	7.3
Pickering B	13.8	14.8	15.5
Darlington	27.5	27.5	27.2
Total	**45.0**	**49.4**	**50.0**
Net Change in Generation	**(0.2)**	**(1.2)**	**(3.0)**
Major Changes *(predominantly Pickering A)*			
- Decision not to restart Units 2 & 3			(3.3)
- Additional Unit 4 outage in 2006		(1.0)	

ONTARIO POWER GENERATION

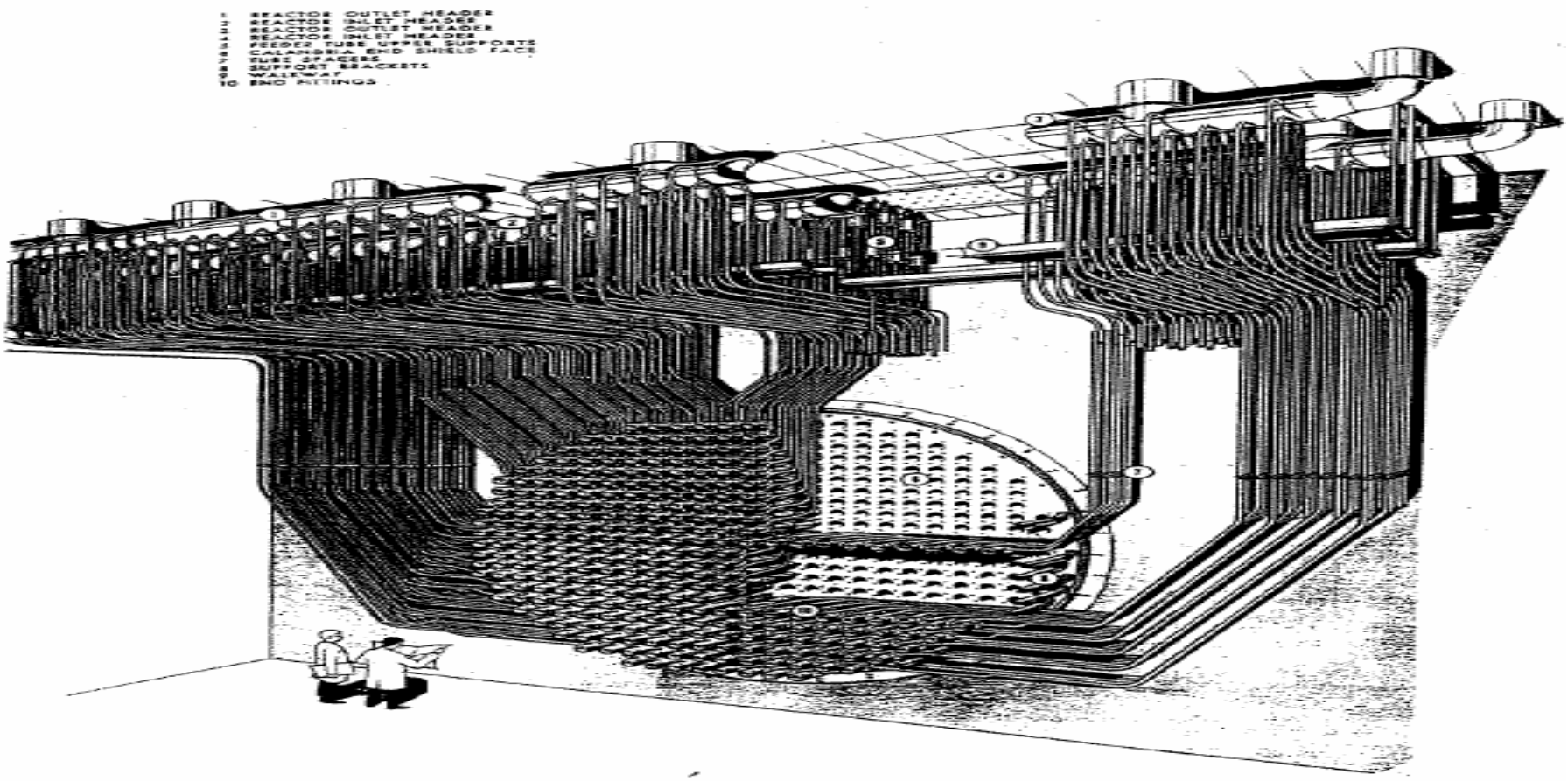
Nuclear Business Plan Objectives

- ✓ Continued focus on high safety performance
- ✓ Improving material condition
- ✓ Improving human performance and productivity
- ✓ Addressing major issues around plant and human resources
- ✓ Maintaining the life extension option

Key Nuclear Initiatives

1. Feeders

- Feeder thinning still a major threat to service life. Strategy is to anticipate replacement in regular planned outages



Feeder pipe configuration in a CANDU reactor (Pickering A).

Key Nuclear Initiatives

2. Supply Chain

- Availability of parts continues to be the most important program in support of material condition improvement for aging plants.

3. Pickering A Units 2/3 Safe Storage Project

- Objective is to complete project scope, schedule, and definitive cost estimate to de-fuel, de-water and place Units 2/3 in safe storage state

4. Leadership and Staffing

5. Option for Life Extension of the Operating Units

- Business case for rehabilitation

Business Plan – Major Risks

1. **Technology risks**

   "Discovery type" risks; high cost of remediation and /or threat to generation / plant life. Specific current technology `discovery' areas relate to steam generators, feeders, Darlington turbine blade degradation, and Pickering A calandria vault.

2. **Changing Regulatory Requirements**

   There is a significant risk around changing regulatory requirements, especially in the Security area.

3. **External Environment**

   Changing lake conditions and the resulting threat of increased algae runs could necessitate the redesign of the exiting screenhouses. Changing weather conditions and transmission availability could expose the plants to the potential of protracted outages and equipment damage.

4. **Human resource development and planning**

   Demographic profile and shrinking replacement pool challenge ability to sustain performance. In the next 5 years, more than 30% of our highly skilled trades and technical staff expected to retire.