2017 Business Plan Rollout

Ontario Power Generation – Nuclear

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PICKERING Strategic Direction NUCLEAR Overview Overview

POWER WITH PURPOSE: Providing low cost power in a safe, clean, reliable and sustainable manner for the benefit of our customers and shareholder.



Safe, Environmentally Responsible INITIATIVES Optimize Asset Management Operations and Support Efficiencies DRIVERS · Deliver On Time, On Budget ᇜ Industry Leading Project Management EVI VALUE ш Regulated Asset S Revenue Strategy ENTERPRI Commercial Focus and ΚEΥ Financial Flexibility Risk Management Expand Core Business Public Trust ш Indigenous Relations Engaged Workforce ENABLED BY CULTURE SHIFTS . ONE OPG



- Darlington for the Future
- Project Management Centre of Excellence
- Regulatory Effectiveness
- Equity Optimization
- Growth Plan
- Outreach
- Relationships and
- One OPG Culture

GOALS: 2021

- Achieve Net Income of \$1B and ROE of 7%
- Maintain our 30% generation price advantage for the benefit of customers
- · Establish growth platforms that put OPG on track to replace 3,000 MW of retiring generation
- · Build a diverse. healthy, engaged workforce and the culture to succeed in a challenging future

VALUES: • Safety • Integrity • Excellence • People & Citizenship

Efficient and Good Judgement • Facilitated Leadership • Outcomes and Results



PICKERING What can each of us NUCLEAR do to be successful?

- Work Safely
- Work Efficiently
- Work with Quality
- Support the Darlington Refurbishment
- Demonstrate OPG's behaviours: Integrate & Collaborate,
 Simplify It, Tell It as It Is, and Think Top and Bottom Line.







Planning for End of Commercial Operations









End of Station Operations

Need the right people with the right skills at the right time

Preparing the physical plant, managing impacts across OPG and on the community

Safe Storage

Takes place at the end of commercial operations

Involves removing fuel from the reactors and draining the water and liquids from most systems

Decommissioning

Takes place after safe storage, OPG will begin a process to dismantle the structures

Decommissioning is a multi-decade process with distinct phases

Repurposing Pickering Project

Strong correlation between public input and the project team's conclusions

Next Steps: evaluation to assess commercial viability and ease of implementation



Not Quite 2015 – the Best Ever in Site History...



....but a pretty close second!



2016 – Priority Results

- Human Performance: below target (1 Event-Free Day Resets against a target of 2) – best performance in site history.
- Teamwork: metric is Net Electrical Production and our target was 20.8 TWh. Under target – main contributor: planned outage extensions.
- Work Management: Online Corrective Maintenance Backlog – target of 55. Getting work ready remains a challenge.





Looking Ahead

2017 – Achieving Total Excellence in Performance!

- Extended Operations Program
- Re-Licencing
- Focus on the Critical Improvements
 Passion for Excellence (P4E)
- WANO Peer Evaluation
- Key Business Plan Targets



Extending Operation Beyond 2020

- Business Case supporting Extended Operation approved by OPG BoD.
- Government endorsed change to Pickering planning basis to 2022 / 2024
- New planning basis must be supported by:
 - CCAs—condition assessments (incl. PT Life Extension Program)
 - PSR (Periodic Safety Review) update / Global Assessment Report
 - Integrated Improvement Plan
 - Ability to execute within the business case estimate
 - Must be captured in the LTEP in 2017
 - Re-licensing with the CNSC
 - Most importantly—our performance and the passion for excellence



Pickering Nuclear Continued Operations

All six units would operate until 2022; two units would then shut down and four units would operate to 2024.

- Clean energy supply during refurbishments.
- OPG has started work on a licence application for CNSC approval in 2018.

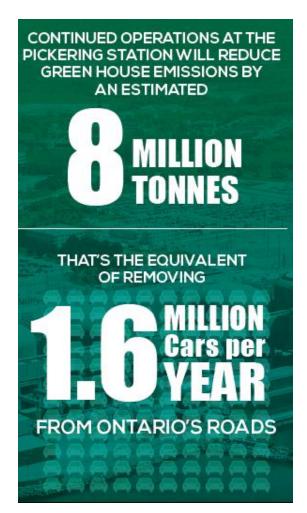
JOBS ACROSS

OPG Studies

- Periodic Safety Review
- Component Condition Assessments
- Major Component Assessments



OF THE PICKERING NUCLEAR STATION IS ASSOCIATED WITH





Re - Licensing

- Timeline:
 - June 2017 letter on SD sequence—current license
 - August 2017: license submission
 - October / November 2017: GAR & IIP
 - April 2018: Commission Hearing—Part 1
 - June 2018: Commission Hearing—Part 2
- Process:
 - Licensing package
- What to Expect:
 - Interventions of Support
 - Interventions of Challenge
 - Making Us Stronger





PICKERING NUCLEARVision and Priorities

HOW IT ALL FITS TOGETHER



HUMAN PERFORMANCE BEHAVIOURS

- Execute work safely and with quality
- Celebrate successes and accept learning opportunities
- . Choose and use the right Event-Free Tools for every job
- Use constructive and positive poor coeching

2017

Event-Free Day Resets (#)



TEAMWORK BEHAVIOURS

- Foster an open and collaborative environment
- . Empower effective and efficient cross-functional teams
- Facilitate effective decision making

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Net Electrical Production (TWA)

20.1

FIX THE PLANT BEHAVIOURS

- . Prioritize, prepare and ready the right work
- Optimize our resources
- . Produce quality online and outage work schedules
- . Execute the work safely and with quality

Doline Corrective Maintenance

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HUMAN PERFORMANCE BEHAVIOURS

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2017

Event-Free Day Resets (#)

TARGET

2

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2017

Net Electrical Production (TWh)

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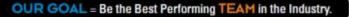
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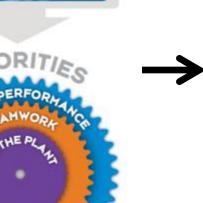
Online Corrective Maintenance Backlog (WOs/Unit)

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Questions?



