

UNDERTAKING J5.3

Undertaking

To provide minimum complement summary for different categories for Darlington and Pickering.

Response

The Pickering minimum complement is 84 people. This is documented in the extract from the Pickering Nuclear Power Reactor Operating Licence provided at page 1 of Attachment 1.

The Darlington minimum complement is 57 people when no fuel handling trolleys are being operated, or 61 people when all three fuel handling trolleys are being operated. Note that the capability to operate three trolleys is required for long term operation. The Darlington minimum complement is documented in the extract from the relevant Darlington procedure, which is referenced in the Darlington Nuclear Power Reactor Operating Licence and provided at page 2 of Attachment 1.

The minimum complement is the minimum number of people that must be on site at all times as required by CNSC licensing.

In order to ensure that the licensed minimum is always met, OPG uses five rotating shift crews and must cover for vacation, training and illness.

The number of people needed to cover the minimum complement at Pickering is approximately 630 people.

The number of people needed to cover the minimum complement at Darlington is approximately 475 people.

APPENDIX A – Operational Limits

A.1 MINIMUM SHIFT COMPLEMENT

Work Group/Position	Number Required
PNGS-A Shift Manager	1
PNGS-A Control Room Shift Operating Supervisor* / Control Room Shift Supervisor*	1
PNGS-A Field Shift Operating Supervisor	1
PNGS-A Shift Advisor Technical Support	1
PNGS-A Authorized Nuclear Operator	4
PNGS-A Supervising Nuclear Operator (1 SCPO qualified)	4
PNGS-A Nuclear Operators (2 unit SCPO/MCR Uninhabitable, and CSP qualified; 1 SCBA qualified)	8
PNGS-A Fuel Handling Major Panel Operator** (FH qualified)	1
PNGS-A Fuel Handling Nuclear Operator** (FH qualified)	1
PNGS-B Shift Manager	1
PNGS-B Control Room Shift Supervisor	1
PNGS-B Field Shift Operating Supervisor	1
PNGS-B Shift Advisor Technical Support	1
PNGS-B Authorized Nuclear Operator	6
PNGS-B Supervising Nuclear Operator	4
PNGS-B Nuclear Operators (1 SCBA trained)	8
PNGS-B Fuel Handling Major Panel Operator (FH qualified)	1
PNGS-B Fuel Handling Nuclear Operator (FH qualified)***	1
Major Panel Operator UPP	1
Common Services Supervising Nuclear Operator	1
Common Services Screenhouse Operator	1
Maintenance First Line Manager – Control	1
Control Maintenance First Line Manager Assistant	1
Control Maintenance Shift Control Technician (1 SCBA)	6
Maintenance First Line Manager – Mechanical	1
Mechanical Maintenance First Line Manager Assistant	1
Shift Mechanical Maintainer (1 SCBA)	6
Civil Maintenance First Line Manager	1
Civil Maintainer	2
Chemical Laboratory Technician	2
Shift Stock Keeper	2
Shift Emergency Response Manager	1
Emergency Response Maintainer	5
Volunteer Emergency Response Team Member	6
Total	84

* The Control Room Shift Operating Supervisor position is scheduled to be eliminated and replaced by that of Control Room Shift Supervisor

** Only required when fuelling PNGS-A

*** The PNGS-B FH Operator required for the work group complement can assume one of two emergency roles (i.e. assist SM PNGS-B or CSP Monitor (if qualified))

Darlington Procedure

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APPENDIX A: Shift Complements by Work Group

Work Group/Position	Minimum Complement	Scheduled Complement	Normal Complement
Shift Management Team	3	4	4
Shift Manager	1	1	1
Control Room Shift Supervisor	1	1	1
Shift Advisor Technical Support (SATS)	1	1	1
Field Shift Operating Supervisor	0	1	1
Unit and Unit 0 Nuclear Operators	24	28	35
Units Authorized Nuclear Operator	5	6	6
Supervising Nuclear Operator	4	4	4
Nuclear Operator	10	12	17
Unit 0 Control Room Operator	2	2	2
Supervising Nuclear Operator	0	1	1
Nuclear Operators	3	3	5
TRF Nuclear Operators	4	4	6
Supervising Nuclear Operator	1	1	1
Major Panel Operator	1	1	1
Nuclear Operator	2	2	4
Mechanical Maintenance Group	6	7	10
FLM - Mechanical	1	1	1
Journeyman, Improver or Learner	5	6	9
Control Maintenance Group	6	7	10
FLM - Control	1	1	1
Shift Control Technician	5	6	9
Chemical Control Group	2	2	3
Shift Chemical Technician	2	2	3
Stores	2	3	3
Stockkeeper	2	2	2
UTS II	0	1	1
Civil Maintenance Group	2	3	4
Civil Maintainers II or III	2	3	4
Security (See Note)	NS	NS	NS
FLM - Security			
Security Officers			

Darlington Procedure

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Title: STATION SHIFT COMPLEMENT

APPENDIX A: Shift Complements by Work Group (Continued)

Work Group/Position	Minimum Complement				Scheduled Complement				Normal Complement			
	2	4	5	6	3	5	6	8	5	5	8	10
Emergency Response Maintainers	6				7				10			
Shift Emergency Response Manager	1				1				1			
Emergency Response Maintainers	5				6				9			
Fuel Handling	2	4	5	6	3	5	6	8	5	5	8	10
Number of Trolleys Operated	0	1	2	3	0	1	2	3	0	1	2	3
First Line Manager	0	0	0	0	0	1	1	1	1	1	1	1
Supervising Nuclear Operator	1	1	1	1	1	1	1	1	1	1	1	1
Major Panel Operator	0	1	2	3	0	1	2	3	1	1	3	4
Nuclear Operator	1	2	2	2	2	2	2	3	2	2	3	4
Total Station Shift Complement (See Note)	57	59	60	61	68	70	71	73	90	90	93	95

Total station shift complement represents the sum of all the work group/position numbers in bold.

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