

**Record of Work Experiences
Trade Qualifier or Pre-Apprenticeship Credits
POWER SYSTEMS OPERATOR**

Note to Apprenticeship Applicants

The work experiences on this form are for credit only and must have been performed prior to registration as an apprentice.

Applicant Information

Name: _____	Surname	First	Initial	
Address: _____ / _____ / _____ / _____	P.O. Box/Street	City/Town	Province	Postal Code
Telephone: (____) _____	Cell: (____) _____	Email: _____		

Note to Employer

By completing the section below you are confirming that the hours indicated for the applicant are specific to employment in the **Power Systems Operator** trade.

Verified By: _____ * **CRA Business #:** _____
Company Name 9 Digits

Address: _____ / _____ / _____ / _____
P.O. Box/Street City/Town Province Postal Code

Telephone: (____) _____ Employer or Representative Name (Print)

Employer or Representative Signature

Employer or Representative Email Address

Date of applicant's employment from: _____ / _____ / _____ to: _____ / _____ / _____
Month Day Year Month Day Year

Total hours of employment the applicant worked in the **Power Systems Operator** trade:

Hours

* **CRA - Canadian Revenue Agency**

Please check the appropriate box:

Trade Qualifiers <input type="checkbox"/>	The signature of the Journeyperson following each of the required skills acknowledges the applicant has met the competencies in each of the skill areas according to the Industry Standard associated with this trade.
Pre- Apprenticeship Credits <input type="checkbox"/>	The signature of the Journeyperson following each of the required skills acknowledges the applicant has performed in each of the skill areas appropriate for this trade.

- The Provincial Trade Advisory Committee in the Power Systems Operator trade has identified the work experiences or skills listed below as those required for the trade.
- Journeypersons **must** be certified in the trade stated by this document. A Journeyperson in another trade may sign certain sections if the skills are common to both trades.

Skills Required For Certification "Core" – ALL Regions	Performed to Journeyperson Standard			Apprentice's Verification
	Journeyperson Signature	Date	Certificate Number	
SAFETY RELATED FUNCTIONS				
Demonstrate safe work practices and personal protection				
Use PPE and safety equipment				
Perform work protection / lockout and tag out procedures				
Lead a tailboard safety talk				
CONTROL ROOM				
Read and interpret basic drawings				
Operate SCADA system				
Perform trend monitoring (with or without SCADA)				
Operate unit control systems				

Skills Required For Certification "Core" – ALL Regions	Performed to Journeyperson Standard			Apprentice's Verification
	Journeyperson Signature	Date	Certificate Number	
Follow procedures to respond to fire alarms				
Operate and test emergency diesel equipment				
Complete outage reports				
Operate applicable software applications (ie: Windows or Excel-based software, Vaisala, RSMACC, ESM II, etc.)				
Monitor and adjust air conditioning for the communications room				
POWERHOUSE UNITS				
Manually operate governor system				
Add air / blow down the accumulator tank in the governor system				
Monitor the cooling water requirements of the units				
Adjust cooling water requirements				
Monitor and record oil levels in bearings				
Monitor and record temperatures in bearings				
Operate water strainers and bypass				
Manually operate brakes				

Skills Required For Certification "Core" – ALL Regions	Performed to Journeyperson Standard			Apprentice's Verification
	Journeyperson Signature	Date	Certificate Number	
POWERHOUSE GENERAL				
Manually synchronize generator to system				
Monitor and perform regular maintenance checks on air systems				
Monitor powerhouse sump systems				
Monitor DC distribution systems				
Monitor AC distribution systems				
Operate communication systems (ie: telephone, PA and / or pager)				
Complete daily reading checklists				
Complete weekly reading checklists				
Complete monthly reading checklists				
Racking of breakers				
Monitor and operate fire systems				
Complete switching for transmission lines				
Monitor auxiliary air systems (service air)				
Monitor and troubleshoot tailrace monitoring systems				
Operate powerhouse ventilation (ie: louvers, fans)				

Skills Required For Certification "Core" – ALL Regions	Performed to Journeyperson Standard			Apprentice's Verification
	Journeyperson Signature	Date	Certificate Number	
Monitor headpond levels				
CONTROL STRUCTURES / SPILLWAY				
Operate control structures / spillway gates				

Skills Required For Certification <u>Bay d'Espoir Region ONLY</u>	Performed to Journeyperson Standard			Apprentice's Verification
	Journeyperson Signature	Date	Certificate Number	
INTAKE				
Raise / lower head gates				
Water up penstock				
Monitor trash racks				
Monitor intake / vent chamber				
Monitor for frazil ice				
POWERHOUSE UNITS				
Manually operate spherical / butterfly valve				
Add oil to bearings				
Pressurize the governor system				
Perform draft tube watering up and de-watering procedures				
Monitor excitation transformers for nitrogen loss				
CONTROL STRUCTURES / SPILLWAY				
Perform inspection on a spillway structure				
CONTROL ROOM				
Operate VHF radios				

Skills Required For Certification Bay d'Espoir Region ONLY	Performed to Journeyperson Standard			Apprentice's Verification
	Journeyperson Signature	Date	Certificate Number	
SWITCHYARD				
Operate cut outs				
Complete switchyard inspections				
Operate disconnects and ground switches				
Operate breaker / recloser				
Read kWh meters				

Skills Required For Certification <u>Churchill Falls Region ONLY</u>	Performed to Journeyperson Standard			Apprentice's Verification
	Journeyperson Signature	Date	Certificate Number	
INTAKE				
Check intake gates for leakage				
Raise / lower head gates				
Water up penstock				
Monitor intake / vent chamber				
Monitor intake gate wells				
SWITCHYARD				
Switch over air dryers				
Reset air dryer / compressor alarms				
Operate racking system for 15 kV breaker				
Drain transformer spill containment structures				
Complete switchyard inspections				
Operate disconnects and ground switches				
Operate breaker / recloser				
Read kWh meters				
CONTROL ROOM				
Monitor hydran readings in SCADA				
Perform the procedures for elevator isolation				
Operate VHF radios				
Monitor transmission line load limits				
Operate intake and forebay gate control systems				

Skills Required For Certification <u>Churchill Falls Region ONLY</u>	Performed to Journeyperson Standard			Apprentice's Verification
	Journeyperson Signature	Date	Certificate Number	
POWERHOUSE UNITS				
Monitor brushes				
Pressurize / de-pressurize the governor system				
Perform draft tube watering up and de-watering procedures				
Monitor and test oil and water separator sump operation				
Manually perform step sequence for start-up of generator				
Install locking pins / mechanical lock on operating ring / servo motor				
CONTROL STRUCTURES / SPILLWAY				
Perform inspection on a spillway structure				
POWERHOUSE GENERAL				
Perform test powerhouse evacuation procedures				
Test the refuge chamber diesel operation				
POWERHOUSE TRANSFORMERS				
Reset / drain leak detectors				

Skills Required For Certification Exploits Region <u>ONLY</u>	Performed to Journeyperson Standard			Apprentice's Verification
	Journeyperson Signature	Date	Certificate Number	
INTAKE				
Monitor trash racks				
Monitor intake / vent chamber				
Monitor intake gate wells				
Monitor for frazil ice				
POWERHOUSE UNITS				
Manually operate spherical / butterfly valve				
Monitor and test oil and water separator sump operation				
Add oil to bearings				
Monitor brushes				
Pressurize the governor system				
Manually perform step sequence for start-up of generator				
CANAL				
Monitor fish louver system				
Monitor fish bypass system				
Monitor level control for Exploits River Management Association (ERMA)				
Monitor and maintain proper water levels and flow conditions during installation of fish louvers by boat crews				
EXPLOITS RIVER				
Monitor flow variations (controlled and uncontrolled watershed)				

Skills Required For Certification <u>Exploits Region ONLY</u>	Performed to Journeyperson Standard			Apprentice's Verification
	Journeyperson Signature	Date	Certificate Number	
Monitor the flow during river freeze-up (North Angle area) for risk of flooding TCH and follow procedures to notify the department responsible for highways				
Maintain prescribed GFW and BF headpond levels through river flow variations				
Facilitate safe installation of flashboards on GFW and BF dams by river crews				
Manage GFW and BF headpond levels while considering public safety (ie: boaters, anglers, homeowners)				
SWITCHYARD				
Drain transformer spill containment structures				
Complete switchyard inspections				
Operate disconnects and ground switches				
Operate breaker / recloser				
Read kWh meters				
CONTROL STRUCTURES / SPILLWAY (INTAKE)				
Monitor water levels during the installation of stop logs				
Perform manual gate change				
CONTROL ROOM				
Operate forebay spill gate				

Skills Required For Certification Deer Lake Power Region ONLY	Performed to Journeyperson Standard			Apprentice's Verification
	Journeyperson Signature	Date	Certificate Number	
INTAKE				
Raise / lower head gates				
Monitor trash racks				
Monitor for frazil ice				
POWERHOUSE UNITS				
Add oil to bearings				
Monitor brushes				
Manually operate spherical / butterfly valve				
Monitor and test oil and water separator sump operation				
Install portable grounds				
Manually perform step sequence for start-up of generator				
Install locking pins / mechanical lock on operating ring / servo motor				
POWERHOUSE AUXILIARIES				
Monitor bio-green system				
Monitor tie line as per purchasing agreement with NL Hydro				
WATSONS BROOK				
Monitor flow variations (controlled and uncontrolled watershed)				
Perform daily consultation on Corner Brook Lake water release strategy				

Skills Required For Certification	Performed to Journeyperson Standard			Apprentice's Verification
	Journeyperson Signature	Date	Certificate Number	
Deer Lake Power Region ONLY	CONTROL STRUCTURES / SPILLWAY (INTAKE)			
Monitor water levels during the installation of stop logs				
CONTROL ROOM				
Operate intake and forebay gate control systems				
Monitor transmission line load limits				
SWITCHYARD				
Complete switchyard inspections				
Operate disconnects and ground switches				
Operate breaker / recloser				
Read kWh meters				

Skills Required For Certification <u>Muskrat Falls Region ONLY</u>	Performed to Journeyperson Standard			Apprentice's Verification
	Journeyperson Signature	Date	Certificate Number	
INTAKE				
Manually perform initial fill of the unit during start up				
Raise / lower head gates				
Monitor intake / vent chamber				
POWERHOUSE UNITS				
Monitor AC / DC head cover pumps				
Monitor head cover for leakage				
Manually perform step sequence for start-up of generator				
Install locking pins / mechanical lock on operating ring / servo motor				
Inspect oil head and brush gear for abnormalities (confined space)				
Monitor sand filters for cooling water systems				
Pressurize / de-pressurize the governor system				
SWITCHYARD / TERMINAL STATION				
Operate borescope for isolation verification (GIS building)				
Operate a GIS mimic board				

Skills Required For Certification <u>Muskrat Falls Region ONLY</u>	Performed to Journeyperson Standard			Apprentice's Verification
	Journeyperson Signature	Date	Certificate Number	
CONTROL ROOM				
Monitor trash racks				
Operate VHF radios				
Manually operate intake and forebay gate control systems				
Perform test powerhouse evacuation procedures				
CONTROL STRUCTURES / SPILLWAY				
Perform inspection on a spillway structure				
Manually raise / lower spillway gates				
POWERHOUSE GENERAL				
Perform watering-up / de-watering procedures				
Monitor and test oil and water separator sump operation				
Operate racking devices for breakers				
Perform the procedures for elevator isolation				
Perform daily inspection of transformers				

Note to Journeypersons

- Journeypersons who have applied their signatures to the skills required for the certification section of this document must complete the following sections.
- The Apprenticeship and Trades Certification Division, for the purpose of verification, may contact Journeypersons who have applied their signatures to skills for applicants.

Journeyperson Supervisor Verification

Name: _____
Surname _____ First _____ Initial _____

Address: _____ / _____ / _____ / _____
P.O. Box/Street _____ City/Town _____ Province _____ Postal Code _____

Telephone: (____) _____ Cell: (____) _____ Email: _____

Certificate Number: _____ and/or I.P. Number: _____

Issuing Jurisdiction: _____

Name (signature): _____

Journeyperson Supervisor Verification

Name: _____
Surname _____ First _____ Initial _____

Address: _____ / _____ / _____ / _____
P.O. Box/Street _____ City/Town _____ Province _____ Postal Code _____

Telephone: (____) _____ Cell: (____) _____ Email: _____

Certificate Number: _____ and/or I.P. Number: _____

Issuing Jurisdiction: _____

Name (signature): _____

For Office Use Only

Credit: _____

Approved by: _____ Date: _____
Month / Day / Year

Note To Trade Qualifier Applicants

If employer verification is not possible, please contact the nearest Apprenticeship and Trades Certification Office to discuss available options.

Contact Information

Avalon	Clarenville	Central	Western	Labrador
Apprenticeship and Trades Certification Division Industrial Training Section 1170 Topsail Road P.O. Box 8700 St. John's, NL A1B 4J6 Phone: 709-729-2729 Fax: 709-729-5878 Toll Free: 1-877-771-3737	Apprenticeship and Trades Certification Division Industrial Training Section 45 Tilley's Road Clarenville, NL A5A 1Z4 Phone: 709-466-3982 Fax: 709-466-3987 Toll Free: 877-771-3737	Apprenticeship and Trades Certification Division Industrial Training Section 42 Hardy Avenue Grand Falls-Windsor, NL A2A 2J9 Phone: 709-292-4215 Fax: 709-292-4502 Toll Free: 1-877-771-3737	Apprenticeship and Trades Certification Division Industrial Training Section 1-3 Union Street Aylward Building, 2nd Floor P.O. Box 2006 Corner Brook, NL A2H 6J8 Phone: 709-637-2366 Fax: 709-637-2519 Toll Free: 877-771-3737	Apprenticeship and Trades Certification Division Industrial Training Section 163 Hamilton River Road, Bursey Building P.O. Box 3014, Station "B" Happy Valley-Goose Bay, NL A0P 1E0 Phone: 709-896-6348 Fax: 709-896-6703 Toll Free: 1-877-771-3737

The personal information in this form is being collected under the authority of section 61(c) of the **Access to Information and Protection of Privacy Act, 2015** for the purpose of verifying work experience for apprenticeship credit. If you have any questions about the collection, use and disclosure of your personal information, please contact an Apprenticeship Program Officer at one of ATCD's regional offices, or email app@gov.nl.ca.