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Electrical Engineering Resume

Dedicated to customer service, Ready is meticulous in its electrical engineering work. Relying on a solid understanding of electrical engineering rather than handbooks, Ready personnel deliver properly engineered electrical designs that optimize the clients' return on investment.

Professional Services	Technologies	Industries Served
Design, Specifications, Drafting	LV and MV gear (to 25kV)	Power Generation
Power System Studies	DC Systems (24/129/258Vdc)	Mining & Metals
Engineering Economy	Generator Protection and AVR	Pulp & Paper
Due Diligence	Protective Relays	Oil & Gas
Motor Application and Starting	Fieldbus MCC/Breaker Control	Chemicals
Driven Load Analysis	VFD, RVSS, Fluid Coupling	Water & Wastewater
Engineering Field Services	AutoCAD and Microstation	Pipeline
		Composting
		Special Waste Treatment

Ready's combined capabilities in industrial power distribution and control systems provide a complete Instrumentation/Controls/Electrical engineering solution from one source. Ready can design new power distribution systems from the ground up or can retrofit new equipment into existing facilities. Ready has retrofitted equipment in systems while they stay online, ensuring a smooth integration with minimal or no interruption to our customer's live operations.

Power Distribution

Engineering from substation to load.

Drawing packages, including single lines, three lines, equipment layout, protection and control, grounding, hazardous area classifications, and cable schedules.

Detailed contractor work packages.

Equipment specification and procurement.

Ready uses computer software to model small distribution systems or complete industrial plants operating at multiple voltage levels. Modeling a system is useful in new system design, for comparison of existing load/fault levels with equipment ratings, and for investigating transient disturbances on systems. Power system reports are backed up, where practical, with actual field measurements.

Studies

Load Flow	Fault Levels
Voltage Drop	Motor Application and Starting Methods
Voltage Droop	Power Management and Load Shedding
Harmonic Mitigation and Compliance	Transient Disturbances
Due Diligence	Engineering Economy
Energy Efficiency Initiatives (i.e. Lighting Upgrades)	
Single Stage and Multistage Power Factor Correction	
Protective Device Evaluation and Coordination	

With utility deregulation and rising energy costs, power management can significantly reduce operating costs. Ready Engineering can provide a power management study and, using our expertise in controls, integrate a power management program with the existing plant control system.

Ready's usual motor application study also includes a thorough mechanical analysis to ensure that an appropriate starting method is chosen to prevent start up torque (which is typically two to three times rated torque) from over-stressing the drive and driven components. Solutions may include the proper application of a VFD, soft starter, or fluid coupling, but may also be found in the strengthening of a mechanical component, such as a chain drive.

Typical Equipment

MV and LV Motor Starters and Power Circuit Breakers	
LV Power and Molded Case Circuit Breaker Applications	
Solid State Relays: Multilin, Basler, PML, etc.	Electromechanical Relays
MV and LV MCCs	MV Switchgear and Switchboards
VFD	UPS
Power Transformers	Auto Transfer Switches



Typical Clients	
Alberta Power	Alstom Power, Inc.
Associated Engineering	ATCO Pipelines
ATCO Power	Babcock-Hitachi K.K.
Celanese	Clark Public Utilities
ConocoPhillips	DAK Americas
DAPP Power	Dofasco
Earth Tech	Elk Valley Coal
EPCOR	G. Michaels Consulting
Gas Transmission Northwest	Hexion Specialty Chemicals
Hudson Bay Mining and Smelting	Inco
Keyera	Lehigh Inland Cement
Luscar	Navigo Energy
Northern Energy & Mining Inc. (NEMI)	Norwest
PacifiCorp	Pegasus Technologies
Petrovera Resources	Portland General Electric
Quinsam Coal	Redding Electric Utility
Scantech International	Syncrude
Tenaska	Town of Mayerthorpe
TransAlta	Trimark Engineering
Whitecourt Power	Zellstoff Celgar

A cornerstone of Ready's success is our insistence on working closely with our customers throughout a project. While not earth shattering, many designers miss this fundamental concept, resulting in mismatches between customer requirements and system features. Ready works closely with the customer's engineering, maintenance, and operations personnel to ensure that all aspects of a design are considered, and the needs of all three groups met. Working closely with other consultants and contractors involved in the project ensures that each work scope meshes seamlessly. Ready has acted as the owner's representative, coordinating other contractors and consultants to provide well designed, smoothly implemented systems.

Office Locations	
Edmonton (Spruce Grove), AB	Olympia, WA
Lethbridge, AB	Castlegar, BC