



## Controls for Single and Multiple Genset Operation



# 2 Day Program easYgen – 3000 Series Training Agenda

70 East Beaver Creek Rd,  
Unit 10, Richmond Hill, ON  
L4B 3B2  
416 907-3844

### COURSE OBJECTIVE

The complete course will cover the basic requirements for implementation and startup of Woodward easYgen 3000 series power management control system. Emphasis will be made on the fundamental aspects of power controls and power generation control systems to include installation, configuration, commissioning and maintenance.

### THE FOLLOWING TOPICS WILL BE COVERED:

- ❖ Power Generation – Instrumentation
- ❖ Governor controls
- ❖ Single and multiple genset applications
- ❖ Modbus communication
- ❖ Configuration via software – Woodward Toolkit
- ❖ Basic theory of Power Generation Systems
- ❖ Paralleling, loading/unloading, power transfer
- ❖ Import/Export controls, VAR/PF controls
- ❖ Baseload, Isochronous Loadsharing, Droop controls

### CONTROLLERS

- ❖ easYgen 3100/3200 genset controller
- ❖ easYgen 3400/3500 genset controller
- ❖ 2301E Electronic Speed governor

Students will have an opportunity to establish communication with the controllers and perform initial configuration from factory default settings. They will understand the parameters and settings that apply to a specific application.

### PRICE

\$935.00 CAD

Minimum 3 Student booking required

### ATTENDANCE

3~5 Students per session, allowances can be made available for a larger volume, please advise.

8:00am ~ 4:00pm

Students will have an understanding of the following concepts:

- ❖ Engine Controls
- ❖ Breaker Controls
- ❖ Power Management
- ❖ Generator Protection
- ❖ Diesel/Gas Application
- ❖ Turbine Application
- ❖ Mode of Operation
- ❖ Remote Communication protocols
- ❖ Load-Dependent Start/stop
- ❖ Communication topology
- ❖ Loss of power, standby operation, prime power
- ❖ Speed/Frequency control, voltage/PF control

The following will be provided:

- ❖ Communication cables and adapters
- ❖ Softwares & drivers
- ❖ Classroom accessories
- ❖ Breakfast & Lunch(at Madsen facility)

Note: Students are required to bring Laptops  
Compatible operating systems: WinXP, Win7

### CONTACTS

#### MADSEN CONTROLS & ENGINEERING

Richmond Hill, Ontario.

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Senior Account Manager

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#### MADSEN DIESEL & TURBINE

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