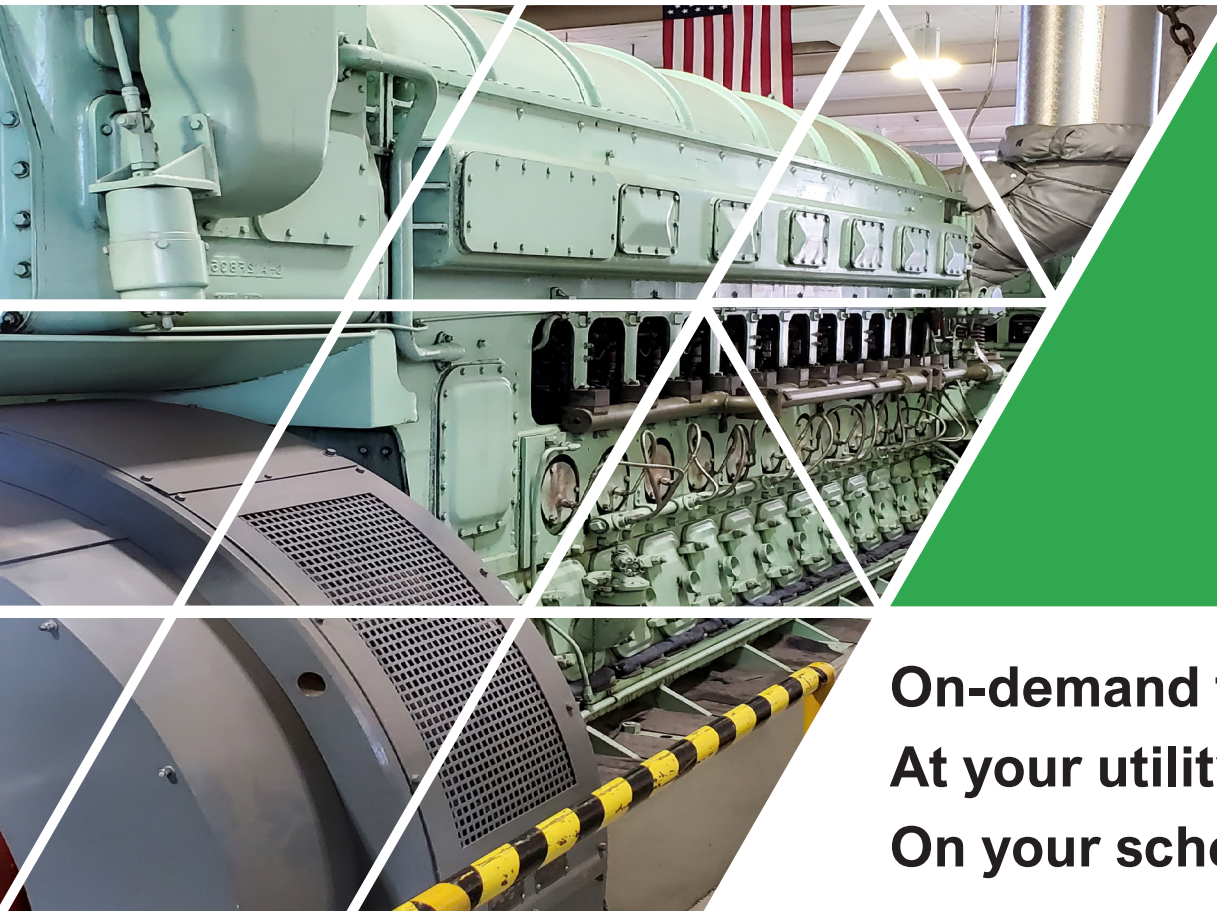




*Safety Team*

# Diesel Generation Operator Training Program



**On-demand training.  
At your utility.  
On your schedule.**

# Diesel Generation Operations Training Program Overview

## Generate safely.

The Diesel Generation Operator Training (DGOT) program is a new offering from the Minnesota Municipal Utilities Association (MMUA). Many Minnesotan towns have the capacity to generate their own electricity, and qualified operators are difficult to find. MMUA has developed DGOT to assist towns with assessment, education, and oversight of their generation procedures and practices to create a situation for safe operation of generation facilities for personnel and equipment.



### Technical training

Begin your journey through the Diesel Generation Operator Training program (DGOT) by participating in one of several customizable training subjects such as normal operations review, black-start operations review, or facility inspection and maintenance.

Also available is a program customized to your facility to help train employees to become qualified generation operators. This program will include subjects such as understanding basic station one-line drawings, understanding of cooling, lube oil, and fuel systems, safe operations of equipment, and more.

Your utility may have staff interested in becoming qualified as a generation operator. The DGOT will help these employees acquire hands-on training. For experienced generation operators, the DGOT will offer training evaluation and enrichment opportunities.



### Operational support

Through the DGOT, you will receive additional support on operations and maintenance policies and procedures, including scheduling regular maintenance.

### Meet the instructor



MMUA Generation Coordinator and JT&S Instructor **Paul Helling**, a 16-year municipal generation operator with experience in several different facilities before joining the association, will lead this training opportunity for towns of any size and workers of any skill level.

If you are interested in joining or learning more about the DGOT program, please contact Paul Helling by phone at 507-381-8028 or by email at [phelling@mmua.org](mailto:phelling@mmua.org).

# Diesel Generation Operations Training Program Topics

## Training topic #1—normal operations

This training will focus on industry best practices to create a standardized process for startup, shut down, and operating procedures. We will also review standard operating procedures for dispatch communication and line switching, as well as checklists for training/annual review of procedures for employees. Additional topics to be discussed include:

- Generation job briefings
- Communications during operations
- Hazardous energy control procedures
- Hot work permits and procedures
- Emergency procedures

## Training topic #2—black start operations

Black start can be stressful on your equipment and personnel, especially if not practiced routinely. We will cover best practices for black start/dead plant procedures including:

- Back up starting procedures, station power, manual synchronizing procedures, and load equalization procedures
- The importance of communication with transmission dispatch centers and distribution line crews before/ during black start conditions
- Communicating with customers (residential and commercial) and local law enforcement dispatch
- Resync procedures to tie back into the grid
- Job briefing with focus on hazardous energy control procedures, emergency procedures, and review applicable safety regulations

## Training topic #3—normal operations run logs and round sheets

The importance of run logs and daily/weekly/monthly operator round sheets cannot be overstated. This training will include sample templates that you can incorporate into your process. This is also an opportunity to analyze your run sheets.

- We will discuss the use of run logs during operations and why we do them.
- Review standardized exercise schedules including annual urge testing procedures.
- Analyze run sheets to identify any trends, deficiencies, or determine if additional readings should be recorded.



## Training topic #4—station battery, starting battery, and starting air system maintenance

For safe operation of your generation equipment and the safety of personnel working in the plant, it is essential that your DC/station battery banks and air system are properly maintained, tested and that these activities are accurately documented. Training will cover:

- The importance of maintenance of DC station batteries and testing procedures.
- The importance of maintenance of starting batteries and testing procedures.
- Proper maintenance of your compressed air system and air system conditioning.
- If applicable, station/back up power generation maintenance and exercise schedule will be discussed.

## Training topic #5—facility inspection

The facility inspection will include a walk-through of your facility as we discuss a variety of topics that are often overlooked in our generation facilities including:

- Electrical equipment testing
- Facility security
- Instrument testing
- Fire suppression systems, alarms, fire equipment testing
- Arc flash study compliance
- SPCC review
- Equipment inspections
- Personal protective equipment and safety equipment



# Diesel Generation Operator Training Program Inquiry Form

## Contact Information

Name: \_\_\_\_\_

Utility/Co.: \_\_\_\_\_

Address: \_\_\_\_\_

Email: \_\_\_\_\_

Phone: \_\_\_\_\_

## Training Selection

Please indicate which training session(s) you would like to schedule.

Normal operations

Black start operations

Normal operations run logs and round sheets

Station battery, starting battery, and starting air system maintenance

Facility inspection

Custom program build (pricing will vary, please describe request: \_\_\_\_\_)

## Rate Information

Rates vary based on time and customization. Please indicate the desired length of your training, and our Safety Team will reach out to you to schedule your session. Multiple training topics can be covered in a six-hour session but not in a three-hour session.

Half-day training session—\$1,200

Full-day training session—\$2,000

Custom program build (pricing will vary)

To schedule a session, please submit this form by email to program coordinator Paul Helling at [phelling@mmua.org](mailto:phelling@mmua.org). Scheduling is subject to instructor availability and will be determined on a first-come, first-serve basis. For any questions, please contact Paul by email or by phone at 507-381-8028.

