

**November 2005**

**Subject:** Replacing Selector Switches

**Applies to:** General Electric gas turbines models MS5001D-LA

Older GE gas turbines typically use an Operation Selector Switch (ANSI code is **43**). This is a multi-position switch that allows the operator to select various positions: **OFF, CRANK, FIRE, AUTO or REMOTE**. Selection depends upon how far the operator wants the sequence to progress; in the case of AUTO or REMOTE, it depends upon at what location the operator wants to retain control.

There are many functions that depend upon switch location. Also, there are many electrical contacts and “make before break” functions associated with switch 43.



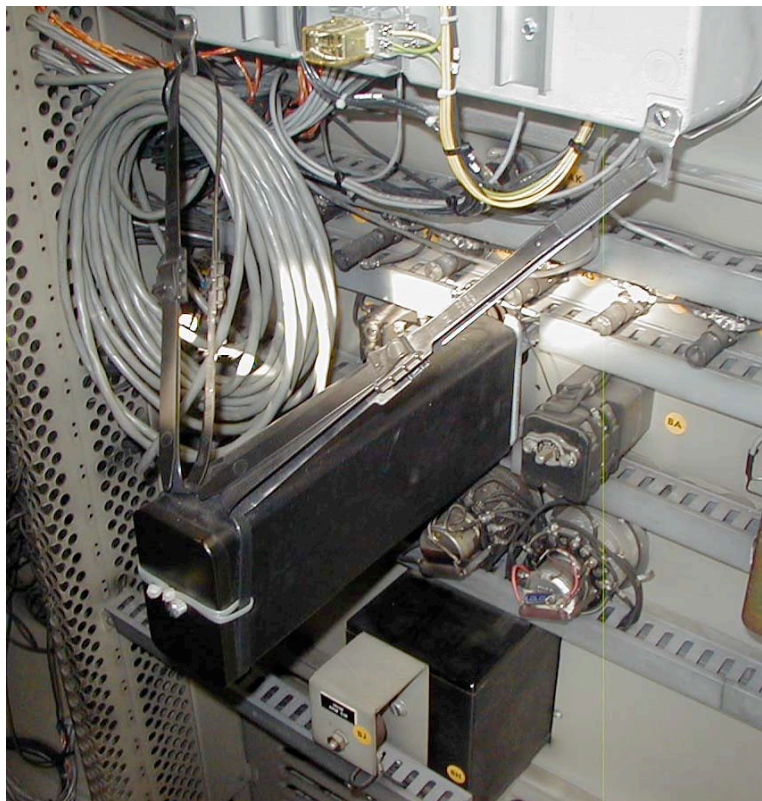
*Fig. 1: Operation Selector Switch in Use by Engineer*

The selector switch “juts out” from the rear of the turbine control panel approximately 15 inches. This protrusion often causes problems, because someone can back into it and damage it. See Fig. 2 below.



*Fig. 2: Rear view of turbine control panel showing the long selector switch body (center, lower)*

The operation selector switch in Figure 3 below is damaged. Two straps are required to support it with braces on the back panel. These switches can be replaced, if necessary. However, they are not regularly available on the market in new old stock (NOS). The switch in Fig. 3 below often “wiggles” out of position, sometimes causing the turbine to TRIP during operation.



*Fig. 3: Close-up of damaged Operation Selector Switch (called 43). See straps holding it secure.*

A replacement panel built by **PAL Engineering** is shown in Figure 4 below. It shows several modern switches including a 43 Operation Selector Switch in the lower left side of the photo.



*Fig. 4: Replacement Selector Switches (43 Switch in lower left-hand corner)*

For further information about selector switches, contact Dave Lucier of **Pond and Lucier, LLC** by calling: 518-330-4801.