Subject: Otis Escalators-Unexpected Motion

May 7, 2018

Brothers and Sisters

Below is an Otis Safety Alert regarding Unexpected Motion of side by side escalators installed in the late 1980’s early 1990’s.

The issue as reported to The IUEC:

On responding to a shut-down of an up escalator, side by side with a down escalator, a mechanic barricaded the escalator pits, entered the barricaded truss and powered down the faulted out up unit. Through troubleshooting, with both escalators not running, when the disconnect was powered down, the opposite unit started in the up direction without any outside interaction. The down escalator started on its own during the troubleshooting process.

Mechanics were able to get both escalators to start on their own during a power up or down of the opposite unit, primarily in the up direction. On 4 occasions during a power up of the up escalator, both the up and down units started simultaneously, both in the up direction. By moving the disconnect switch to the on position on either escalator, both escalators started to run. The mechanics determined the issue was with the Mother Board (picture attached) and relayed the information to their supervisor. Through conversations with Otis Safety, we were informed that the issue occurred when current was induced through a dry capacitor on the Mother Board.
Below is the Safety Message from Otis:

Otis has been advised of a near miss when an idle escalator, wired for tandem operation, started to move as main line power was removed from the opposite unit. All associates must be advised that both units in any tandem operation installation should be barricaded at both ends and removed from service whenever main line power is removed from or restored to either unit. Similar precautions must be taken when working on simplex escalators.

• Associates must be well clear of any moving components of either unit when either main line disconnect is operated.

• Associates must be well clear of any moving components of a simplex unit when the main line disconnect is operated.

Fraternally,

IUEC Safety Committee

It is the mission of the IUEC Safety Committee to improve the Elevator Constructor’s sense of awareness to daily hazards present in the workplace.