



## Why carry out High Voltage Testing?

There are many forms of testing that can be carried out on high voltage systems, but by far the most common is voltage detection or voltage indication, this is the process of checking that a voltage is present or not in a particular part of a high voltage system. Although under some circumstances work is carried out on high voltage systems while they are 'live', it is usually a requirement that the system is made 'dead' by a process call safe isolation before any work is carried out on, or near high voltage systems. Voltage detectors or indicators are therefore required to confirm that there is no voltage present at the point of work, after safe isolation and before work is carried out.

Another high voltage testing application for which Seaward's HV products are used is 'Phasing'. Almost all supply networks operate using multiphase systems, generally 3 phase. In a 3 phase system three line conductors (L1, L2 & L3) are used, each out of phase with the other two conductors by 120°. It is crucial that correct polarity and phase rotation is maintained throughout the supply network from the point of generation all the way through to the point of utilisation. If correct phasing is not maintained there can be many dangerous consequences. For example a simple mistake which reverses the connection of two phases can cause certain types of electric motor to run in the opposite direction, not great if this motor is connected to a sewerage pump or conveyor belt. Scale this type of phasing error up to parts of the generation network and the results can be catastrophic. Phasing Sticks such as Seaward's PR11, PR15 and PR33 can be used to test for correct phasing before connections are made.

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