Retrofit Solution
High Speed Transfer Device
Upgrade to SUE 3000
Voltage drops or complete supply interruptions represent nowadays the most important and critical problems in the quality of energy supply today. In particular voltage disturbances with electronic control systems and other sensitive installations can lead to complete loss of production and long stoppage times.

Looking back on a 50 years history with more than 2100 High Speed Transfer Devices and Systems supplied to power stations and sensitive industrial plants worldwide, ABB can offer a unique know-how in that special field of application. As a competence centre for such systems we work out tailor-made solutions to the benefit of our customers for upgrading older ABB or third party transfer systems. The aim of the retrofit solution is to quickly and easily replace the existing transfer equipment by the new transfer system.

Advantages
The advantages of the offered solutions are as follows:
- The existing interfaces to the involved switch bays on one side and to protection, control and SCADA system on the other side are maintained to the maximum extent.
- The existing cable connections are utilized one by one. There is no need of laying additional cables.
- The terminal designations inside the new cabinet remain the same as in the old cabinet offering the enormous advantage that the opposite terminal designations in all related plant documents do not need to be revised, what is very often a time-consuming and cumbersome work.
- The terminal blocks inside the new cabinet are arranged in the same way as in the existing cabinet ensuring that existing cables and wires will fit perfectly.
- All connected processes to switchgear, protection and remote control are left unchanged making the re-commissioning works quite easy.
- Additional functionality (Fault recorder, Display, etc.)
- Integration in to substation control systems by means of serial buses (IEC 61850, Modbus, Profibus, etc.)
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**Typical procedure of a retrofit project**
- Checking the execution of the existing cabinet by means of as-built drawings and pictures of the existing cabinet.
- Drafting the new cabinet layout and circuit diagrams paying special attention to adopt the terminal arrangement one by one.
- Complete functional tests of the cabinet before shipment.
- Thorough marking and labelling of all cables & wires before pulling out from terminal blocks.
- Disconnecting all cables from existing cabinet and lowering to cable basement.
- Dismantling of the existing cabinet.
- Mounting & fixing of the new cabinet.
- Pulling up the existing cables from basement into new cabinet.
- Termination of existing wires simply following the markings attached in the step before.
- Performing all commissioning test of the new High Speed Transfer System.
- Preparation of test reports and documentation.

**Different variants of retrofit solutions**
- A complete new cubicle matching layout and dimensions of the existing cubicle will be supplied. This is the preferred solution offering the benefit of minimum time for assembling and testing works at site.
- Alternatively a new High Speed Transfer Device can be integrated in the existing cubicle. It is evident, that this solution will cause higher efforts for assembling and testing at site.
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