F. The programming software shall support bump less run mode storage of the program to the CPU.

G. The software shall have provisions for importing and exporting tag names, comments and descriptions in an .xls format

1.3.22.20 Instruction Set

A. The programming language shall be BS EN 61131-3 compliant.

B. The CPU shall be capable of solving an application program whose source format shall be relay ladder diagram. The language shall support relay, timers and counters, arithmetic, relational, bit operation, data move, conversion, and control functions etc.

C. The CPU shall be capable of solving an application program whose main program format is in Sequential Function Chart (SFC) with underlying code in relay ladder diagram.

D. Control functions shall be provided to limit program execution, an immediate I/O update of all or a portion of the inputs or outputs for one scan while the program is running, or to update I/O during the program in addition to the normal I/O scan.

E. Additionally, the function shall provide a mean to read inputs into memory auxiliary to the true input table, and execute outputs from discrete memory alternate to the true output table.

F. A method for structuring the ladder program shall be provided with the use of a JUMP Function. This will cause the program execution to jump to a specified location in the logic targeted by the location of the LABEL function.

G. Diagnostic and fault detection requirements shall typically include I/O data corruption, single bit RAM failures, power supply failures, processor failures, and I/O bus failures.

H. Hot standby systems where specified shall detect and report failures of all critical components so that appropriate control actions may be taken. All components that acquire or distribute I/O data or that are involved in execution of the control logic solution are considered critical components. A fault in the active unit shall cause a switch of control to the backup unit. Refer to the particular section for detailed specification pertaining to Hot-Standby systems if specified.