ME24_07 - Integrating Electrical Equipment Designed with Different Standard (ANSI and IEC)

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Abstract - Electrical system design involving many electrical equipment may not be designed uniformly with same standards due to challenges in supply chain of equipment, project time schedule and utility preferences for operation and maintenance. However, when this equipment is interconnected, these shall be rated adequately in order to perform the task as per desired function and safety. This paper discusses the design consideration for integrating this electrical equipment which are manufactured with non-uniform international standard (either based on ANSI or IEC practices) especially for Middle East region and paper focuses on equipment sizing, selection of ratings and specification with respect to voltage and short circuit parameters. Paper discusses major equipment namely Transformer, MV switchgear, cables and equipment terminal temperature. The LV switchgear and Control gear, hazardous area classification is not covered in this paper.