THREE PHASE POWER REFERENCE PART II

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Abstract

Compilation of data provides insight to many areas of improvements to Voltage Amplification in stability, accuracy, and noise suppression. A revisit from last year's paper "Introduction to a Three Phase Power Reference" provides conclusion for many haunting problems when producing three phase alternating current voltages up to 600V with a long term stability of < 25ppm and an accuracy of < 50ppm. Pitfalls incurred varied from line pickup, high frequency harmonics, thermal drift, power coefficients of resistive elements, loading effect (capacitive, inductive, resistive), phase errors, and limitations in output current compliance. By providing an outline of techniques, which remedy or compromise the problem areas, achievements of stability and accuracy are quite attainable through low cost precision components.