Abstract

Line Loss Reduction is one of the major benefits of Distributed Generation, amongst many others, when incorporated in the Power Distribution System. The quantum of the line loss reduction should be exactly known to assess the effectiveness of the distributed generation. In this paper, the total loss of a practical distribution system is calculated with and without distributed generation and an index, quantifying the total line loss reduction is proposed. Simulation tests have been carried out on a practical distribution system and the proposed index is evaluated for various ratings, locations of distributed generation.

References

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An Approach to Quantify the Loss Reduction due to Distributed Generation


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Index Terms

Computer Science
Power Systems

Keywords
Distributed Generation System Loss Reduction Index