Errata for Implementation of a Large-Scale Optimal Power Flow Solver Based on Semidefinite Programming

This list describes the changes and corrections made to the paper Implementation of a Large-Scale Optimal Power Flow Solver Based on Semidefinite Programming [A] after its initial publication.

1. Error in the objective function of the dual form of the semidefinite relaxation of the OPF.

Corrected October 7, 2013

There was an error in the objective function of the dual form of the semidefinite relaxation of the optimal power flow problem. In equation (20), the term $\sum_{k \in \mathcal{G}_i^q} \left(\underline{\psi}_g P_{Gg}^{min} - \bar{\psi}_g P_{Gg}^{max} + c_{g0} - \mathbf{R}_g^{22} \right) \text{ was incorrectly specified as}$ $\sum_{k \in \mathcal{G}_i^q} \left(\underline{\psi}_g P_{Gg}^{min} - \bar{\psi}_g P_{Gg}^{max} + c_{g0} - \mathbf{R}_g^{12} \right).$

References

[A] D.K. Molzahn, J.T. Holzer, B.C. Lesieutre, and C.L. DeMarco, "Implementation of a Large-Scale Optimal Power Flow Solver Based on Semidefinite Programming," *IEEE Transactions on Power Systems*, vol. 28, no. 4, pp. 3987-3998, November 2013.