

HW6, EE 553, Fall 2012, Dr. McCalley, Due Monday, October 29, 2012

Problem 1: Use the Generalized Reduced Gradient procedure to solve the problem on pp. 16-17 of the class notes called "NLOPF.pdf." The problem is very well set up for you and so all you need to do is apply the analytical algorithm. But please do take time to understand the formulation.

Problem 2: For the matrix of the system used in HW6, Problem #1, assume the initial solution  $z(0)$  is the one obtained in the notes by the economic dispatch solution. Then obtain the Hessian matrix, and take a single step to obtain a new point  $z(1)$ .