In this paper, we propose a method to optimally set the reactive power contributions of distributed energy resources (DERs) present in distribution systems with the goal of regulating bus voltages. For the case when the network is balanced, we use the branch power flow modeling approach for radial power systems to formulate an optimal power flow (OPF) problem. Then, we leverage properties of the system operating conditions to relax certain nonlinear terms of this OPF, which results in a convex quadratic program (QP). To efficiently solve this QP, we propose a distributed algorithm based on the Alternating Direction Method of Multipliers (ADMM). Furthermore, we include the unbalanced three-phase formulation to extend the ideas introduced for the balanced network case. We present several case studies to demonstrate the method in unbalanced three-phase distribution systems.