

## عنوان مقاله:

A Novel Unit Commitment Approach Considering Transmission Constraints

## محل انتشار:

پانزدهمین کنفرانس مهندسی برق ایران (سال: 1386)

تعداد صفحات اصل مقاله: 6

## نویسندگان:

Farrokh Aminifar - Sharif University of Technology

Amin Khodaei - Sharif University of Technology

## خلاصه مقاله:

This paper introduces a novel approach for generation scheduling of power systems with transmission line limits consideration. The new method decomposes the solution of the transmission constrained unit commitment problem into two subproblems. In the first subproblem the quadratic cost function of units linearized and hourly optimum solution of UC is obtained. Then, all of UC problem constraints are satisfied except transmission line power limits. A new mixed integer formulation for subproblem two is presented here. The results of this subproblem must be returned into subproblem one for satisfying unit constraints, if needed. The six-bus system with units is analyzed to exhibit the effectiveness of the proposed approach.

## کلمات کلیدی:

Generation Scheduling, Linear Sensitivity Factors, Mixed-Integer Programming Transmission Constrained Unit Commitment

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/25490>

