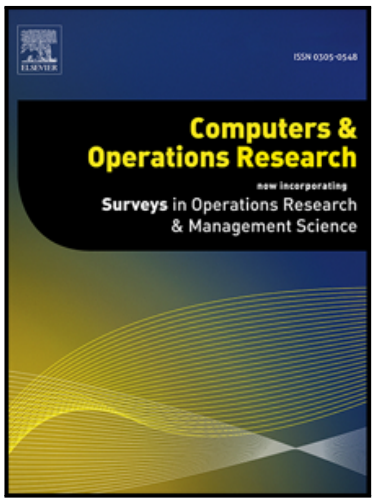

A long-term capacity expansion planning model for an electric power system integrating large-size renewable energy technologies

Daiki Min, Jong-hyun Ryu, Dong Gu Choi

PII: S0305-0548(17)30264-2
DOI: 10.1016/j.cor.2017.10.006
Reference: CAOR 4342

To appear in: *Computers and Operations Research*

Received date: 27 February 2017
Revised date: 9 September 2017
Accepted date: 13 October 2017

Please cite this article as: Daiki Min, Jong-hyun Ryu, Dong Gu Choi, A long-term capacity expansion planning model for an electric power system integrating large-size renewable energy technologies, *Computers and Operations Research* (2017), doi: 10.1016/j.cor.2017.10.006

Highlights

- A new model with large-scale renewable energy technologies (RETs) is proposed.
- The proposed stochastic model overcomes the drawbacks of existing models.
- A heuristic-embedded sample average approximation method is proposed.
- Uncertain RETs require more capacity to meet the target reliability of a system.