Coordinated scheduling of electricity and natural gas infrastructures with a transient model for natural gas flow

Cong Liu[1,2,a)], **Mohammad Shahidehpour**[1,b)] and **Jianhui Wang**[2,c)]
a) E-mail: **cliu35@iit.edu** & **liuc@anl.gov**
b) E-mail: **ms@iit.edu**
c) E-mail: **jianhui.wang@anl.gov**
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