## Accepted Manuscript

Title: An integrated predictive model of the long-term performance of ground source heat pump (GSHP) systems

Authors: Wenxin Li, Xiangdong Li, Yong Wang, Jiyuan Tu

PII: S0378-7788(17)32664-6

DOI: https://doi.org/10.1016/j.enbuild.2017.11.012

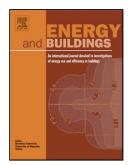
Reference: ENB 8134

To appear in: *ENB* 

Received date: 4-8-2017 Revised date: 10-10-2017 Accepted date: 9-11-2017

Please cite this article as: Wenxin Li, Xiangdong Li, Yong Wang, Jiyuan Tu, An integrated predictive model of the long-term performance of ground source heat pump (GSHP) systems, Energy and Buildings https://doi.org/10.1016/j.enbuild.2017.11.012

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



### ACCEPTED MANUSCRIPT

# An integrated predictive model of the long-term performance of ground source heat pump (GSHP) systems

Wenxin Li a, b, c, Xiangdong Li c, Yong Wang a, b, Jiyuan Tuc

<sup>a</sup> National Centre for International Research of Low-carbon and Green Buildings, Ministry of Science & Technology, Chongqing University, Chongqing 400045, China

<sup>b</sup> Joint International Research Laboratory of Green Buildings and Built Environments, Ministry of Education, Chongqing University, Chongqing 400045, China

<sup>c</sup> School of Engineering, RMIT University, PO Box 71, Bundoora, VIC 3083, Australia

Mailing address: Prof. Jiyuan Tu

School of Engineering

RMIT University, PO Box 71

Bundoora VIC 3083

Australia

Email: jiyuan.tu@rmit.edu.au

Tel: +61-3-9925-6191

Fax: +61-3-9925-6108.

#### Highlights:

- An integrated simulation model of ground source heat pump system was proposed.
- The proposed model was validated with three-year data from practical engineering.
- Dynamic operation characteristics and system accessories should be considered.
- 15-year performances of systems with different thermal imbalance ratios were evaluated.
- The increased thermal imbalance ratio can deteriorate the system performance.

#### Download English Version:

# https://daneshyari.com/en/article/6729201

Download Persian Version:

https://daneshyari.com/article/6729201

<u>Daneshyari.com</u>