

This Form 6-K consists of:

An announcement on payment of final dividend of Huaneng Power International, Inc. (the “Registrant”), made by the Registrant on June 30, 2010.

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PAYMENT OF FINAL DIVIDEND

Reference is made to the announcement of Huaneng Power International, Inc. (the “Company”) dated 22 June 2010 in relation to the resolutions passed at the 2009 annual general meeting (the “Announcement”).

Pursuant to the Announcement, the shareholders’ meeting of the Company had resolved to, among other things, pay a final cash dividend of Renminbi (“RMB”) 0.21 (inclusive of tax) per share to holders of H Shares whose names appeared on the H Share register of members of the Company at 4:30 p.m, on 1 June 2010 (“H Share Record Date”). Dividend on H Shares traded on The Stock Exchange of Hong Kong Limited will be paid in Hong Kong dollars, dividends on other foreign shares will be paid in US dollars. Exchange rate for dividends paid in US dollars and Hong Kong dollars are USD1 to RMB6.82625 and HK\$1 to RMB0.87956 respectively.

Pursuant to the relevant tax rules and regulations of the People’s Republic of China (“PRC”), an enterprise income tax at the rate of 10% is applicable to dividends payable to the Company’s shareholders who are non-resident enterprises. In accordance with the relevant tax rules and regulations of the PRC, the Company has an obligation to withhold for the payment of the enterprise income tax from the payment of the final dividend to non-resident enterprises (including HKSCC (Nominees) Limited) whose names appeared on the H Shares register of members on the H Share Record Date. No enterprise income tax at the rate of 10% will be withheld in respect of dividends to natural persons whose names appeared on the H shares register of members of the Company on the H Share Record Date.

Pursuant to the request of relevant PRC tax authorities, the Company is obliged to comply with the relevant rules and regulations to withhold and pay enterprise income tax for shareholders (including non-resident enterprise and resident enterprise shareholders) whose names appeared

on the register of members of H Shares at 4:30 p.m on the H Share Record Date. Non-resident enterprises considered to enjoy the tax benefit (arrangement) please arrange or through appointed agents submit the relevant applications to tax authorities concerned for processing relevant matters. For enterprises incorporated in the PRC or non-PRC incorporated enterprises which are resident enterprises (such term shall have the meaning as defined under the relevant tax rules and regulations of the PRC) listed on the register of members of the Company on the H Share Record Date, please contact the following persons of the Company before 30 August 2010 for making tax refund applications:

| Name | Telephone | Address |
|---|----------------|--|
| Chang Bosheng (Finance Department of the Company) | 8610-6322-6559 | Huaneng Building, No.4 Fuxingmennai Street, Xicheng District, Beijing, PRC |
| Xie Meixin (Corporate Securities Department of the Company) | 8610-6322-6590 | Huaneng Building, No.4 Fuxingmennai Street, Xicheng District, Beijing, PRC |

Upon approval from the annual general meeting on 22 June 2010, the Company has been processing the relevant tax arrangement with relevant tax authorities. The Company anticipates that the final dividends (net of enterprise income tax) will be paid to holders of H Shares on or before 30 July 2010, relevant cheques will be dispatched at the same time to holders of H Shares entitled to receive such dividends by ordinary post and at their own risk.

By Order of the Board
 Gu Biquan
 Company Secretary

As at the date of this announcement, the directors of the Company are:

| | |
|--|--|
| Cao Peixi (Executive Director) | Liu Jipeng (Independent Non-executive Director) |
| Huang Long (Non-executive Director) | Yu Ning (Independent Non-executive Director) |
| Wu Dawei (Non-executive Director) | Shao Shiwei (Independent Non-executive Director) |
| Huang Jian (Non-executive Director) | Zheng Jianchao (Independent Non-executive Director) |
| Liu Guoyue | Wu Liansheng |

(Executive Director)

Fan Xiaxia

(Executive Director)

Shan Qunying

(Non-executive Director)

Xu Zujian

(Non-executive Director)

Huang Mingyuan

(Non-executive Director)

Liu Shuyuan

(Non-executive Director)

(Independent Non-executive Director)

Beijing, the PRC

30 June 2010

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SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the under-signed, thereunto duly authorized.

HUANENG POWER INTERNATIONAL, INC.

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|----|---------------|-------------------|
| By | /s/ Gu Biquan | |
| | Name: | Gu Biquan |
| | Title: | Company Secretary |

Date: June 30, 2010