

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM 8-K  
CURRENT REPORT

Pursuant to Section 13 OR 15(d) of The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported) **December 20, 2019**

**PACIFIC GREEN TECHNOLOGIES INC.**

(Exact name of registrant as specified in its charter)

**Delaware**

(State or other jurisdiction  
of incorporation)

**000-54756**

(Commission File Number)

**n/a**

(IRS Employer  
Identification No.)

**Suite 10212, 8 The Green Dover, DE**

(Address of principal executive offices)

**19901**

(Zip Code)

Registrant's telephone number, including area code **(302) 601-4659**

**N/A**

(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Shares	PGTK	OTC Markets

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

**Item 1.01 Entry into a Material Definitive Agreement.**

**Item 2.01 Completion of Acquisition of Assets**

Pacific Green Technologies Inc. (“PGTK”) has acquired 75% of the registered share capital of Shanghai Engin Digital Technology Co. Ltd, a company incorporated and registered in China (“ENGIN”), for maximum consideration of RMB 76,000,000. The vendor is Beijing Shouhang IHW Resources Saving Technology Company Ltd. (“Shouhang”), a company listed on the Shenzhen Stock Exchange in China.

PGTK and Shouhang agreed and signed the transaction on December 20, 2019 (the “Shouhang Agreement”). Consideration is payable as follows:

- RMB 41,000,000 payable on signing;
- RMB 15,000,000 payable on or before 20 March 2020;
- RMB 20,000,000 payable on successful completion of the Performance Tests (as defined in the Shouhang Agreement appended to this Form 8-K).

The Performance Tests relate to the Dunhuang 100MW Molten Salt Tower Power Plant in China.

In addition to the foregoing, PGTK concurrently acquired the 25% balance of the registered share capital of ENGIN, for maximum consideration of RMB 2,000,000 and the issue of 125,000 new common shares in the capital stock of PGTK. The vendors are Mr. Liu Tao and Ms. Liang Qi (the “Minority Vendors”).

PGTK and the Minority Vendors agreed and signed the transaction on December 20, 2019 (the “Minority Agreement”). Consideration is payable as follows:

- the issue of 125,000 new shares in the capital stock of PGTK to the Vendors;
- RMB 2,000,000 payable on successful completion of the Performance Tests (as defined in the Minority Agreement annexed to this Form 8-K).

**Strategic rationale for the Acquisition**

ENGIN is a design and engineering business focused primarily on Concentrated Solar Power (“CSP”), desalination and waste to energy technologies. ENGIN has a number of reference plants in China. The purpose of the acquisition is to build a portfolio of technologies designed to improve the environment, the stated ambition of PGTK in its last audited accounts for the year ended 31 March, 2019.

The foregoing description of the Shouhang Agreement and Minority Agreement and related transactions does not purport to be complete and is qualified in its entirety by reference to the respective Agreements which are filed as Exhibit 2.1 and Exhibit 2.2, and incorporated by reference herein.

**International Strategic Alliance Agreement**

As part of the Shouhang Agreement, a strategic agreement has been proposed by PGTK, Shouhang and PowerChina for the development of CSP plants to generate electricity whereby PGTK and ENGIN provide engineering and technical know-how, Shouhang provides fabrication, manufacturing, solar field and molten salt tank services and PowerChina performs an EPC role in China and internationally.

**Item 3.02 Unregistered Sales of Equity Securities**

In connection with the closing of the transaction in regards to the Minority Agreement, we are issuing 125,000 restricted shares of our common stock to the Minority Vendors, two non-US persons (as that term is defined in Regulation S of the Securities Act of 1933, as amended) and the shares will be issued in an offshore transaction relying on Regulation S of the Securities Act of 1933, as amended

**Item 8.01 Other Events.**

On December 23, 2019, the Company issued a press release announcing the ENGIN acquisition. A copy of the press release is filed as Exhibit 99.1 and incorporated by reference herein.

**Item 9.01 Financial Statements and Exhibits.**

**(a) Financial Statements of Businesses Acquired.**

As of the date of filing this Current Report on Form 8-K, it is impracticable for the company to provide the financial statements required by Item 9.01(a) of Form 8-K. In accordance with Item 9.01(a)(4) of Form 8-K, such financial statements will be filed by amendment to this Form 8-K within 71 days after the required filing date for this Current Report.

**(b) Pro Forma Financial Information.**

As of the date of filing this Current Report on Form 8-K, it is impracticable for the company to provide the pro forma financial information required by Item 9.01(b) of Form 8-K. In accordance with Item 9.01(b)(2) of Form 8-K, such financial information will be filed by amendment to this Form 8-K within 71 days after the required filing date for this Current Report.

**(d) Exhibits**

<b>Exhibit Number</b>	<b>Description</b>
2.1	<a href="#">Share Purchase Agreement dated December 20, 2019 with Beijing Shouhang IHW Resources Saving Technology Company Ltd.</a>
2.2	<a href="#">Share Purchase Agreement dated December 20, 2019 with Liu Tao and Liang Qi</a>
99.1	<a href="#">Press release dated December 23, 2019.</a>

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

**PACIFIC GREEN TECHNOLOGIES INC.**

*/s/ Scott Poulter*

\_\_\_\_\_  
Scott Poulter  
Chief Executive Officer and Director

Date: December 23, 2019

EXHIBIT INDEX

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99.1	<a href="#">Press release dated December 23, 2019.</a>

**DATED** \_\_\_\_\_ **2019**

**日期：2019 年**

**Beijing Shouhang IHW Resources Saving Technology Company Ltd.**

**北京首航艾启威节能技术股份有限公司**

as Seller

卖方

- and

-和

**Pacific Green Technologies Inc.**

**太平洋绿色技术股份有限公司**

as Buyer

买方

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**SHARE PURCHASE AGREEMENT**

**股权购买协议**

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This agreement is dated \_\_\_\_\_ 2019  
本协议日期为2019年\_\_\_\_\_。

**PARTIES**  
协议双方

- (1) **Beijing Shouhang IHW Resources Saving Technology Company Ltd.** incorporated and registered in the People's Republic of China and whose registered office is at Room 208 No. 3 Building, No. 2 Yushun Road, Daxing District, Beijing and office at Building 20 Block 3, South 4th Ring W. Road 188, Fengtai, Beijing, PRC (**Seller**).  
北京首航艾启威节能技术股份有限公司，一家在中华人民共和国注册并成立的公司，其住所地位于北京市大兴区榆顺路2号3号楼208室；办公室位于中国北京市丰台区南四环西路188号3区20号楼（**卖方**）。
- (2) **Pacific Green Technologies Inc.** incorporated and registered in Delaware and whose registered office is at 8 The Green, Suite #10212, Dover, Delaware 19901, USA(**Buyer**).  
太平洋绿色技术股份有限公司，一家在特拉华州注册并成立的公司，其注册地址为美国特拉华州多佛市The Green8号10212室，邮编19901 (8 The Green, Suite #10212, Dover, Delaware 19901, USA)（**买方**）。

**BACKGROUND**  
背景

- (A) The Company is an engineering and technical consulting company incorporated in China and has issued and registered share capital of RMB 13,200,000.  
公司为在中国成立的工程技术咨询公司，注册资本为人民币13,200,000元，
- (B) The Seller is the owner of the legal and beneficial title to the Sale Shares and the Seller has agreed to sell and the Buyer has agreed to buy the Sale Shares subject to the terms and conditions of this agreement.  
卖方是出售股权的合法实益所有权的所有人，卖方同意出售而买方同意根据本协议的条款和条件购买出售股权。

**AGREED TERMS**  
约定条款

1. **INTERPRETATION**解释

The definitions and rules of interpretation in this clause apply in this agreement.  
本条款中的定义和解释规则适用于本协议。

- 1.1 Definitions:  
定义：

**Accounts:** the audited financial statements of the Company and each of its Subsidiaries as at the Accounts Date and in the case of the Company, the consolidated group accounts of the Company and its Subsidiaries, including in each case the balance sheet, profit and loss account (copies of which are attached to the Disclosure Schedule).

**账簿:** 截至账簿日期的公司及其各子公司的经审计财务报表; 对于公司而言, 则为公司及其各子公司的集团合并账簿, 包括资产负债表、损益表 (副本附在披露表中)。

**Accounts Date:** 31 December 2018.

**账簿日期:** 2018年12月31日。

**Agreement:** this Agreement.

**协议:** 指本协议。

**Business:** the business of the Company and its Subsidiaries, namely but not limited to the design of power facilities, development of solar power technologies, power supply and sales, engineering and technical consulting and development of environmentally friendly products, design and construction of energy-saving projects.

**业务:** 公司及其子公司的业务, 即 (但不限于) 电力设施设计、太阳能技术开发、电力供应和销售、工程技术咨询和环保型产品开发、节能项目设计和建设。

**Business Day:** a day other than a Saturday, Sunday or public holiday in China when banks in Beijing are open for business.

**营业日:** 中国境内除星期六、星期日或公共假期以外北京的银行营业的日子。

**Claim:** a claim for breach of any of the Warranties.

**索赔:** 对违反任何保证的索赔。

**Closing:** the date this Agreement is signed by both parties.

**交割:** 买卖双方签署本协议的日期

**Closing Agenda:** a document, in agreed form, identifying the documents to be delivered by the Buyer and Seller at Closing and the business to be conducted at a board meeting of the Company at Closing.

**交割议程:** 以商定格式指明买卖双方在交割时应交付的文件和在交割时公司董事会会议事项的文件。

**Closing Payment:** the amount of RMB 41,000,000 to be paid after both parties have signed this Agreement by wire transfer and no later than December 27, 2019 following which the Seller shall pay the Receivable by no later than December 31, 2019.

**交割付款:** 人民币41,000,000元的款项需满足本协议第2.4条所述的条件。协议签署后, 不晚于2019年12月27日前支付。

**Company:** Shanghai Engin Digital Technology Co. Ltd, a company incorporated and registered in China with Uniform Social Credit Code 91310112051224370P whose registered office is at Room A2004, Building B, No. 555, Dongchuan Road, Minhang District, Shanghai, China, further details of which are set out in Schedule 1.



公司：上海鹰吉数字技术有限公司，一家在中国注册并成立的公司。其统一社会信用代码为91310112051224370P，住所地位于中国上海市闵行区东川路555号乙楼A2004室。详情见附表1。

**Deferred Payments:** The amount of RMB 15,000,000 payable by 20 March 2020 and an amount of RMB 20,000,000 conditional on satisfactory conclusion of the Performance Tests by 30 June 2020.

**递延付款：**在2020年3月20日前应支付的人民币15,000,000元，和在2020年6月30日前圆满完成性能测试的前提下应支付的人民币20,000,000元。

**Disclosed:** clearly and accurately disclosed in the Disclosure Schedule.

**已披露：**在披露表中清楚准确地披露。

**Disclosure Schedule:** Schedule 3 to this agreement.

**披露表：**本协议的附表3。

**Encumbrance:** any interest or equity of any person (including any right to acquire, option or right of pre-emption) or any mortgage, charge, pledge, lien, assignment, hypothecation, security interest, title retention or any other security agreement or arrangement.

**权利负担：**任何人的任何利益或权益（包括任何获得权、选择权或优先购买权）或任何按揭、押记、质押、留置权、转让、抵押、担保权益、所有权保留或任何其他担保协议或安排。

**EPC:** Engineering, Procurement, Construction, Commissioning and Finance provider.

**工程总承包商：**工程、采购、施工、调试、财务提供方。

**Interim Period:** the period from (and including) the date of this agreement up to (and including) the Closing Date or, if earlier, the termination of this agreement in accordance with its terms.

**过渡期：**从本协议之日（含）起至交割日（含）止的期间，或者（如果更早）至根据本协议条款终止本协议之日的期间。

**International Strategic Alliance Agreement:** a proposed strategic agreement between the Buyer, the Seller and PowerChina for the development of Concentrated Solar Power stations to generate electricity whereby the Buyer provides engineering and technical know-how, the Seller provides fabrication and manufacturing services and the sub-services of solar field and molten salt tank that the Seller confirms and PowerChina acts as an EPC in China and on an international basis.

**国际战略联盟协议：**买方、卖方和中国电建公司之间就开发光热发电站签订的战略协议，其中买方提供工程和技术知识，卖方提供制造服务和卖方认可参加的太阳岛、熔盐岛分包服务，而中国电建公司在中国和国际上作为工程总承包商。

**Longstop Date:** 31 December 2019 or such later date as may be agreed in writing by the Buyer and the Seller.

**最终截止日期：**2019年12月31日或买卖双方书面约定的较晚日期。

**Material Contract:** a contract (executed or unexecuted) that is described as such in Schedule 3.  
**重大合同:** 附表3中描述的 (已签署或未签署) 合同。

**Net Asset Value:** the net Assets shown in the Accounts being not less than RMB 27,000,000.

**净资产值:** 公司及其子公司在账簿中披露的净资产值不低于人民币27,000,000元。

**Performance Tests:** the performance tests for the Company's reference plants that are due to take place in April 2020 and May 2020 to confirm that the Reference Plant meets the criteria prescribed by the PRC governmental standard as attached at Schedule 4. Should the Company in conjunction with the Seller as owner not be in a position to perform the tests then an independent and international third party shall be appointed to perform the tests to the same standard at the cost of the Seller. Any failures to meet the acceptance criteria due to non-design reasons are not included.

**性能测试:** 将于2020年4月和2020年5月进行公司参照工厂的性能测试。如果公司和卖方无法执行测试, 则应指定独立的第三方来按照相同的必需的中国政府标准《太阳能热发电机组投产运行验收技术条件》执行测试, 但费用由卖方承担。由非设计原因导致不能达到验收标准要求的除外。

**PowerChina:** a state owned enterprise in the PRC.  
**中国电建:** 一家中国国有企业。

**PRC:** The People's Republic of China.  
**中华人民共和国。**

**Purchase Price:** the purchase price for the Sale Shares to be paid by the Buyer to the Seller in accordance with Clause 4.  
**购买价格:** 买方根据第4条向卖方支付的出售股权的购买价格。

**Receivable:** an amount of RMB 12,000,000 that is owed by the Seller to the Company as at the date of this Agreement.  
**应收款:** 卖方在本协议签订之日欠公司的人民币12,000,000元。

**Reference Plant:** Dunhuang 100MW Molten Salt Tower Power Plant.  
**参照电厂:** 敦煌100兆瓦熔盐塔式光热发电厂。

**Registered Capital:** the registered capital of the Company being RMB 13,200,000.  
**注册资本:** 公司的注册资本为人民币13,200,000元。

**RMB:** the lawful currency of the PRC.  
**人民币:** 中国的法定货币。

**Sale Shares:** the Seller's seventy five per cent (75%) share of the Registered Capital of the Company.

**出售股权:** 卖方持有的公司实缴注册资本的75%。

**Solar Power Property:** all intellectual property, plant or equipment owned by or licensed to the Company with duration limitation and which relates to solar power or other solar technologies (Photovoltaic and/or Concentrated Solar Power) and which may have been identified by the parties in Schedule 3.

**太阳能财产:** 由公司拥有或卖方许可给公司带有期限的与太阳能或其他太阳能技术 (光伏和/或光热) 有关的和各方在附表3中确认的所有知识产权, 厂房或设备。

**Subsidiary:** in relation to a company wherever incorporated (a **holding company**), any company in which the holding company (or persons acting on its behalf) holds either: a majority of the voting rights exercisable at shareholder meetings of that company; or the right to appoint or remove a majority of its board of directors.

**子公司:**公司在任何地点成立的公司(控股公司)。对于此公司,控股公司(或代表其行事的人)拥有其任何下述权利:在该公司的股东大会上可行使多数表决权;或任命或罢免董事会多数成员的权利。

**Tax or Taxation:** any corporation or other similar tax payable in the PRC by the Company or its Subsidiaries.

**税收:**公司或其子公司在中国境内应缴纳的任何公司或其他类似税收。

**Tax Authority:** means the State Taxation Authority of the PRC.

**税务机关:**指中华人民共和国国家税务机关。

**Transaction:** the transaction contemplated by this agreement or any part of that transaction.

**交易:**本协议规定的交易或该交易的任何部分。

**Transaction Documents:** this agreement and any other document to be entered into pursuant to this agreement in connection with the Transaction.

**交易文件:**本协议以及根据本协议签订的与交易有关的任何其他文件。

**Warranties:** the representations and warranties given pursuant to Clause 7 and set out in Schedule 2.

**保证:**根据第7条并在附表2中列出的陈述和保证。

## 2. CONDITIONS条件

2.1 Closing is subject to and conditional upon the Condition in this Clause 2 being satisfied (or waived by the Buyer in its discretion) by the Longstop Date.  
交割应以截止日期前满足(或由买方酌情决定放弃)的第2条中的条件为条件。

2.2 If any of the Conditions is not fully satisfied in accordance with Clause 2.1, then unless each unfulfilled Condition is waived by the Buyer, this agreement shall terminate and cease to have effect on the Longstop Date except for:  
如果没有根据第2.1条完全满足任何条件,则除非买方放弃每个未满足的条件,否则本协议应在最终截止日期终止并停止生效,但下述除外:

- (a) any provision of this agreement that expressly or by implication is intended to come into or continue in force on or after termination including the provisions referred to in Clause 2.3; and  
明示或暗示地旨在终止时或终止后生效或继续生效的本协议任何规定,包括第2.3条所述的规定;和

(b) any rights, remedies, obligations or liabilities of the parties that have accrued under this agreement up to the date of termination, including the right to claim damages in respect of any breach of the agreement which existed at or before the date of termination.

截至本协议终止之日，根据本协议应计的当事方任何权利、救济、义务或责任，包括就终止之日或之前存在的任何违约行为要求赔偿的权利。

2.3 The Buyer and the Seller shall cooperate fully in all actions necessary to procure the satisfaction of the Conditions, including (but not limited to) the provision by the parties of all information reasonably necessary to make any application for consent or filing that the Buyer deems to be necessary.

买方和卖方应在确保条件满足的所有必要行动中充分合作，包括（但不限于）当事方提供一切合理必要信息，以便进行买方认为必要的同意或备案申请。

2.4 These are the Conditions (**Conditions**):

以下为具体条件（条件）：

(a) The passing at a duly convened meeting of the directors of the Buyer of the agreed resolutions in and the passing at a duly convened meeting of directors and (if required) shareholders of the Seller of the agreed resolutions including the following:

在买方正式召开的董事会会议上通过同意的决议，在卖方正式召开的董事会和（如有需要）股东会议上通过同意的决议，包括：

(i) execution of this Agreement;  
签署本协议；

(ii) execution of any necessary corporate documents to effect this Agreement.  
签署任何必要的公司文件以实施本协议。

### 3. SALE AND PURCHASE 买卖

3.1 On the terms of this agreement and subject to the Conditions, the Seller shall sell and the Buyer shall buy, with effect from Closing, the Sale Shares with full title guarantee free from all Encumbrances and together with all rights that attach (or may in the future attach) to the Sale Shares including, in particular, the right to receive all dividends and distributions declared, made or paid on or after the date of this agreement.

根据本协议条款和条件，卖方应出售且买方应自交割之日起购买出售股权。该出售股权具备完整所有权担保，无任何权利负担并附带（或将来可能附带）所有权利，尤其包括收取本协议之日或之后宣布、做出或支付的所有股息和分配的权利。

- 3.2 The Seller covenants with the Buyer that:  
卖方向买方承诺：
- (a) it has the right to sell the Sale Shares on the terms set out in this agreement;  
卖方有权按照本协议中规定的条款出售股权；
  - (b) it shall do all it can, at its own cost, to give the Buyer the full legal and beneficial title to the Sale Shares;  
卖方应尽其所能，自付费用，给予买方出售股权所有合法权益；
  - (c) it sells the Sale Shares free from all Encumbrances; and  
卖方应出售无任何权利负担的出售股权；和
  - (d) there is no right to require the Company to issue any share capital or create an Encumbrance affecting any unissued shares or debentures or other unissued securities of the Company.  
无权要求公司发行任何股本或创建影响公司任何未发行股票或债券或其他未发行证券的权利负担。
- 3.3 The Buyer is not obliged to complete the purchase of any of the Sale Shares unless the purchase of all the Sale Shares held by the Seller is completed.  
除非卖方持有的公司75%全部出售完成，否则买方没有义务完成任何出售股权的购买。
- 3.4 The Buyer and the Seller agree to use their best endeavours to execute an International Strategic Alliance Agreement.  
买卖双方同意尽最大努力签署《国际战略联盟协议》。

#### 4. PURCHASE PRICE 购买价格

- 4.1 The Purchase Price consists of the Closing Payment and the Deferred Payments.  
购买价格由交割付款和递延付款组成。
- 4.2 The Closing Payment shall be paid by the Buyer to the Seller in cash at Closing in accordance with Clause 4.4.  
买方应根据第4.4条的规定，在交割时以现金向卖方进行交割付款。
- 4.3 The Deferred Payments shall be made by the Buyer to the Seller in cash on satisfactory completion of the Performance Tests and in accordance with the terms of Clause 4.4.  
买方应在满意地完成性能测试后并按照第4.4条的规定，以现金向卖方支付递延付款。
- 4.4 All payments to be made to the Seller under this agreement shall be made in RMB by electronic transfer of immediately available funds to the Seller and to such account as it may direct.  
根据本协议向卖方支付的所有款项均应以人民币支付，通过电子转账将立即可用的资金转移至卖方及其指定的账户。

4.5 At all times during the Interim Period, the Seller shall procure that the Company and its Subsidiaries carry on the Business in the normal course and promptly notify in writing the Buyer of any material change in the Business.  
在过渡期内的任何时候，卖方应促使公司及其子公司正常开展业务，并及时以书面形式将业务的任何重大变化通知买方。

## 5. CLOSING交割

5.1 Closing shall take place on the Closing Date at such place or time as agreed in writing by the Seller and the Buyer.  
交割应在交割日期在买卖双方书面约定的地点或时间进行。

5.2 In this agreement, **Closing Date** means the date when this agreement is signed, unless:  
在本协议中，**交割日期**是指本协议签订日，除非：

- (a) the Conditions have not been fully satisfied (or waived by the Buyer in accordance with Clause 2.1) on or before that date, in which event the Closing Date shall be any other date agreed by the Seller and the Buyer in writing; or  
在该日期或之前尚未完全满足条件（或买方根据第2.1条放弃条件）。在这种情况下，交割日期应为卖方和买方书面同意的任何其他日期；或
- (b) Closing is deferred in accordance with Clause 5.5, in which event the Closing Date shall be the date to which Closing is so deferred.  
根据第5.5条，交割被推迟。在这种情况下，交割日期应为交割被推迟的日期。

5.3 At Closing, the Seller shall:  
交割时，卖方应：

- (a) transfer the Sale Shares in such form as is necessary for the Buyer to acquire legal ownership of the Sale Shares in accordance with the laws of the PRC;  
根据中国法律以买方为获得出售股权的合法所有权所必需的形式转让出售股权；
- (b) otherwise deliver (or cause to be delivered) all other documents and do all such things identified in the Closing Agenda as documents to be delivered by the Seller at Closing; and  
以其他方式交付（或促使交付）所有其他文件，并完成交割议程中确定为卖方在交割时应交付的所有文件；以及
- (c) such confirmation as the Buyer shall reasonably require in relation to future access to the reference plants of the Company and their performance data (both past, present and future). Any relevant visits and requirements should be confirmed in writing by the Seller before they are carried out.  
确认买方就未来访问公司的参考工厂及其性能数据(过去、现在和未来)的合理要求，但相关访问和要求需获得卖方书面确认后后方可实施。

- 5.4 At Closing, the Buyer shall (subject to the Seller complying with Clause 5.3):  
交割时，买方应（视卖方是否遵守第5.3条而定）：
- (a) pay the Closing Payment in accordance with Clause 4; and  
根据第4条支付交割付款；和
  - (b) otherwise deliver (or cause to be delivered) all other documents and do all such things identified in the Closing Agenda as documents to be delivered by the Buyer at Closing.  
以其他方式交付（或促使交付）所有其他文件，并完成交割议程中确定为买方在交割时应交付的所有文件。
- 5.5 If the Seller does not comply with its obligations in clause 5.3 in any material respect the Buyer may (at its sole discretion and without prejudice to any other rights or remedies it may have) (a) proceed to Closing, (b) defer Closing to a date no more than 28 days after the date on which Closing would otherwise have taken place or (c) terminate or rescind this agreement by notice in writing to the Seller.  
如果卖方在任何重大方面不履行第5.3条中的义务，则买方可以（在不影响买方可能拥有的其他权利或救济的情况下，全权酌情决定）（a）进行交割，（b）将交割推迟至本应进行交割之日后不超过28天的日期，或（c）通过书面通知卖方终止或取消本协议。

## 6. WARRANTIES保证

- 6.1 The Seller acknowledges that the Buyer is entering into this agreement in reliance on the Warranties.  
卖方承认买方根据保证订立本协议。
- 6.2 The Seller warrants and represents to the Buyer that, except as Disclosed, each Warranty is true and not misleading on the date of this agreement.  
卖方向买方保证并陈述，除披露外，每项保证在本协议签订之日均真实无误导性。
- 6.3 Without prejudice to the Buyer's right to claim on any other basis or take advantage of any other remedies available to it if any Warranty is breached or proves to be untrue, inaccurate or misleading, the Seller undertakes to pay to the Buyer on demand:  
在不损害买方在任何其他基础上提出索赔的权利或在任何保证被违反或证明不真实、不准确或误导时利用其可获得的任何其他补救措施的权利的情况下，卖方承诺按要求向买方支付：
- (a) the amount necessary to put the Company and each of its Subsidiaries into the position they would have been in if the Warranty had not been breached and had not been untrue, inaccurate or misleading (including costs and expenses); and  
使公司及其各子公司在保证未被违反且不存在不真实、不准确或误导性的情况下处于其应有地位所需的金额（包括成本和费用）；和

- (b) For the payable paid by the Seller to the Company, the Company should pay tax in accordance with Chinese law.  
卖方支付给公司的应付款，公司应按照中国法律缴纳税款。

7. **CONFIDENTIALITY AND ANNOUNCEMENTS**  
**保密和公告**

- 7.1 This agreement is confidential to the parties and is subject to the confidentiality agreement dated 9 September 2019 and made between the Buyer and the Sellers as if set out in full herein and continues in full force and effect.  
双方对本协议保密，并受日期为2019年9月9日的保密协议约束，该协议由买方和卖方订立，视同规定在本协议中，并继续具有完全效力。
- 7.2 Neither party shall make, or permit any person to make, any public announcement, communication or circular concerning this agreement or the Transaction without the prior written consent of the other party (such consent not to be unreasonably withheld or delayed), except to comply with respective governmental or regulatory requirements and the parties shall issue a press release in an agreed form immediately after the date of this agreement.  
未经另一方事先书面同意（不得无理拒绝或延迟该同意），任何一方不得发布或允许任何人发布有关本协议或交易的任何公告、通讯或通知（卖方按照规中国证监会规定必须公开披露的信息除外），且双方应在本协议签署之日后立即以约定的形式发布新闻稿。

8. **GENERAL CLAUSE**  
**一般条款**

- 8.1 Subject to the second sentence of this Clause, no party shall assign, transfer, mortgage, charge, declare a trust of, or deal in any other manner with any or all of its rights and obligations under this agreement (or any other Transaction Document). The Buyer may novate its rights and obligations under this agreement (or any other Transaction Document) to a company within the same ownership and control  
根据本条款第二句的规定，任何一方不得让渡、转让、抵押、押记、声明信托或以其他方式处理其在本协议（或任何其他交易文件）项下的任何或全部权利和义务。买方可以将其在本协议（或任何其他交易文件）项下的权利和义务变更给拥有相同所有权和控制权的公司。
- 8.2 This agreement (together with any other Transaction Document) constitutes the entire agreement between the parties and supersedes all previous discussions and negotiations between them.  
本协议（连同任何其他交易文件）构成双方之间的完整协议，并取代双方之前的所有讨论和谈判。



- 8.3 The Seller shall promptly execute and deliver such documents as the Buyer may reasonably require from time to time for the purpose of giving full effect to this agreement.  
卖方应及时签署并交付买方为使本协议完全生效而不时合理要求的文件。
- 8.4 Each party shall pay its own costs and expenses incurred in connection with the Transaction.  
各方应自行支付与交易有关的成本和开支。
- 8.5 A notice given to a party under or in connection with this agreement shall be in writing and in English, shall be signed by the party giving it to the other party to such fax or email address as that party has given the other for the purposes of this agreement.  
本协议项下或与本协议有关的通知应以英文书面格式发出，并应由发出通知的一方签署。传真或电子邮件地址应与该方为本协议的目的而提供给另一方者相同。
- 8.6 Save as otherwise provided in this agreement, no one other than a party to this agreement, their successors and permitted transferees, shall have any right to enforce any of its terms.  
除本协议另有规定外，除本协议一方，其继任者和允许受让人外，任何人都无权执行本协议的任何条款。
- 8.7 This agreement may be executed in six counterparts, each of which when executed and delivered shall constitute a duplicate original, but all the counterparts shall together constitute the one agreement.  
本协议可一式六份，每一份在签署和交付时应构成一份正本的副本，但所有副本应共同构成一份协议。
- 8.8 Except as expressly provided in this agreement, the rights and remedies provided under this agreement are in addition to, and not exclusive of, any rights or remedies provided by law.  
除本协议明文规定外，本协议项下提供的权利和救济是对法律规定的任何权利或救济的补充，而不是排斥法律规定的任何权利或救济。
- 8.9 This Agreement is made in both English version and Chinese version. Where there is discrepancy between the two languages, the English should prevail.  
本协议以英文和中文书就。如英文和中文不一致的，以英文为准。

9. **GOVERNING LAW AND JURISDICTION**  
**适用法律和管辖权**

- 9.1 This agreement and any dispute or claim (including non-contractual disputes or claims) arising out of or in connection with it or its subject matter or formation shall be governed by and construed in accordance with the law of the jurisdiction of dispute.  
本协议及因本协议或其标的物或标的形式而产生或与之相关的任何争议或索赔（包括非合同争议或索赔）应适用争议管辖地法律并按其解释。
- 9.2 Each party irrevocably agrees that the courts of Hong Kong shall have non-exclusive jurisdiction to settle any dispute or claim (including non-contractual disputes or claims) arising out of or in connection with this agreement or its subject matter or formation.  
各方不可撤销地同意，香港法院对解决因本协议或其标的物或标的形式而产生或与之相关的任何争议或索赔（包括非合同争议或索赔）具有非专属管辖权。

This agreement has been entered into on the date stated at the beginning of it.  
本协议于文首日期订立。

## SCHEDULE 1

## 附表1

## PARTICULARS OF THE COMPANY AND ITS SUBSIDIARIES

## 公司及其子公司的详细信息

**Part 1**  
**第1部分**  
**The Company**  
**公司**

<b>Name:</b> 名称：	<b>Shanghai Engin Digital Technology Co. Ltd</b> 上海鹰吉数字技术有限公司
<b>Registration number:</b> 注册号码：	310112001195605
<b>Registered office:</b> 住所地：	Room A2004, Building B, No. 555, Dongchuan Road, Minhang District, Shanghai, China 中国上海市闵行区东川路555号乙楼A2004室
<b>Issued share capital:</b> 已发行股本：	<b>Amount:</b> 13,200,000 <b>金额：</b> 13,200,000
<b>Registered shareholder(s) (and number of Sale Shares held):</b> 登记股东（及持有的出售股权数量）：	Beijing Shouhang IHW Resources Saving Technology Company Ltd: 990 北京首航艾启威节能技术股份有限公司：990
<b>Directors:</b> 董事：	Liu Tao, Fan Decai, Huang Wenjia, Huang Wenbo, Huang Qingyi 刘涛，范德才，黄文佳，黄文博，黄卿义
<b>Details of charges:</b> 押记明细：	None 无

**Part 2**  
**第2部分**  
**The Subsidiaries**  
**子公司**

<b>Name:</b> 名称 :	Guangdong Northeast Power Engineering Design Co., Ltd. 广东东北电力工程设计有限公司
<b>Registration number:</b> 注册号码 :	9144000077505184X5
<b>Registered office:</b> 住所地 :	Room 601-CB27, No. 30, Zhujiang East Road, Tianhe District, Guangzhou, Guangdong, China 中国广东省广州市天河区珠江东路30号601-CB27室
<b>Issued share capital</b> 已发行股本 :	RMB 10,000,000
<b>Registered shareholders (and number of shares held):</b> 登记股东 (及持有的股权数量) :	<b>Shanghai Engin Digital Technology Co. Ltd</b> 上海鹰吉数字技术有限公司
<b>Directors:</b> 董事 :	Liu Tao 刘涛
<b>Details of charges:</b> 押记明细 :	None 无

**SCHEDULE 2**  
**附表2**

**WARRANTIES**  
**保证条款**

**Part 1**  
**第1部分**

**General warranties**  
**一般保证**

1. **POWER TO SELL THE COMPANY**  
**出售公司的权力**
  - 1.1 The Seller has taken all necessary action and has all requisite power and authority to enter into and perform this agreement and each of the other Transaction Documents.  
卖方已采取一切必要的行动，并具有签署和执行本协议及其他各交易文件的一切必要的权力和权限。
  - 1.2 This agreement and each of the other Transaction Documents constitute valid, legal and binding obligations on the Seller in accordance with their respective terms.  
本协议和其他各交易文件根据其各自的条款对卖方构成有效、合法和有约束力的义务。
  - 1.3 The execution and delivery by the Seller of this agreement and each of the other Transaction Documents to which it is a party and compliance with their respective terms shall not breach or constitute a default under (a) any provision of the Seller's constitutional documents; or (b) any agreement or instrument to which the Seller is a party or by which the Seller is bound; or (c) any order, judgment, decree or other restriction applicable to the Seller.  
卖方签署和交付本协议及其作为一方的其他各交易文件，以及遵守其各自的条款，不得违反或构成以下情况的违约：(a)卖方组织章程及细则的任何条款；或(b)卖方作为一方或受其约束的任何协议或文书；或(c)适用于卖方的任何命令，判决，法令或其他限制。
2. **SHARES IN THE COMPANY AND SUBSIDIARIES**  
**公司及子公司的股权**
  - 2.1 The sale shares consists of 75% the shares of the Company The capital that is to be registered shall be contributed and paid fully.  
出售股权构成公司75%股权，对应注册资本出资已悉数缴付。
  - 2.2 The Seller is the legal and beneficial owner of the Sale Shares and is entitled to transfer the legal title to the Sale Shares to the Buyer free of Encumbrances, without the consent of any other person.  
卖方拥有出售股权的合法权益，有权在没有任何其他人同意的情况下，将出售股权的合法所有权无权利负担地转让给买方。

- 2.3 The Company is the sole legal and beneficial owner of the whole issued share capital of each Subsidiary.  
公司为各子公司全部已发行股本的唯一合法权益所有人。
- 2.4 The issued shares of the Company's Subsidiaries are fully paid up.  
公司子公司的已发行股权已全额缴足。
- 2.5 The Sale Shares and the shares of the Company's Subsidiaries are free from all Encumbrances.  
出售股权及公司子公司的股权并无任何权利负担。
- 2.6 No person has any right to require, at any time, the transfer, creation, issue or allotment of any share, loan capital or other securities of the Company or its Subsidiaries.  
任何人无权在任何时候要求转让、设立、发行或配发公司或其子公司的任何股权、贷款资本或其他证券。

3. **CONSTITUTIONAL AND CORPORATE DOCUMENTS**  
**公司组织章程及细则和法人组织文件**

- 3.1 Copies of the constitutional and corporate documents of the Company and its Subsidiaries have been Disclosed. Such copy documents are (a) complete in all respects; (b) have attached to them copies of all resolutions and agreements required to be so attached; and (c) fully set out all the rights and restrictions attaching to each such class of shares.  
公司及其子公司的组织章程及细则和法人组织文件的副本已获披露。该等副本文件(a)在所有方面均完整；(b)已附上所有须附上的决议及协议的副本；及(c)全面列明各类股权所附带的所有权利及限制。
- 3.2 All returns, particulars, resolutions, statutory books and registers of the Company and its Subsidiaries are up-to-date and have been properly maintained in accordance with the laws of the PRC.  
公司及其子公司的所有纳税申报、详情、决议案、法定帐簿及登记册均为最新资料，并已根据中国法律妥善保管。

4. **INFORMATION**  
**信息**

All information contained in the Disclosure Schedule is true, complete, accurate and not misleading. All information given by or on behalf of the Seller (or its advisers or agents) to the Buyer (or its advisers or agents) in the course of negotiating the Transaction was true, complete, accurate and not misleading.  
披露表中所载所有信息均真实、完整、准确及不具误导性。在交易洽谈过程中由卖方或（或其顾问或代理）代表卖方向买方（或其顾问或代理）提供的信息均真实、完整、准确及不具误导性。

5. **COMPLIANCE WITH LAWS**  
**遵守法律**

The Company and each of its Subsidiaries has at all times conducted its business in accordance with, and has acted in compliance with, the laws of the PRC. Neither the Company nor its Subsidiaries is involved in, or otherwise subject to any material litigation or administrative, mediation, arbitration or other proceedings.  
公司及其所有子公司始终根据中国法律开展业务及遵守中国法律行事。公司及其子公司均不涉入任何重大诉讼或行政、调解、仲裁或其他程序，或受该等程序的规限。

6. **LICENCES AND CONSENTS**  
**许可及同意**

- 6.1 The Company and each of its Subsidiaries has all necessary licences, consents, permits and authorities required to carry on the Business at the date of this agreement (**Consents**). Details of the Consents and copies of all related documentation have been Disclosed without limiting the generality of the foregoing, the licences include the third party licences in relation to Solar Power (Photovoltaic and/or concentrated Solar Power).  
于本协议签订日期，公司及其所有子公司均获得开展业务所需的一切必要许可、同意、准许及授权（同意）。在不限制前述条款一般性的前提下，已对同意及所有相关文件的副本进行详细披露，许可包括与太阳能（光伏和/或光热）相关的第三方许可。
- 6.2 Each of the Consents is valid and subsisting and there is no reason why any of the Consents may be suspended, cancelled or not renewed on the same terms.  
所有同意均有效及存续，且无任何理由根据相同条款中止、取消任何同意或将其续期。

7. **DEFECTIVE PRODUCTS AND SERVICES**  
**缺陷产品和服务**

Neither the Company nor any of its Subsidiaries has manufactured or sold any products or supplied any services which were at the time they were manufactured, sold or supplied or are, or will become, faulty or defective, or which did not or do not comply with any warranties or representations expressly or impliedly made by or on behalf of the Company or any of its Subsidiaries in connection with such products or services; or any laws or regulations applicable to such products or services.  
公司及其任何子公司均未制造、出售或提供在制造、出售或提供之时或日后存在缺点或缺陷或不符合由公司或其任何子公司或代表公司或其任何子公司在有关产品或服务方面作出的任何明示或暗示担保或陈述，或有关产品或服务所适用的任何法律法规的任何产品或服务。

8. **CONTRACTS**  
**合同**

8.1 Each Material Contract is in full force and effect and binding on the parties to it.  
每份重大合同均对合同当事方具有充分效力及约束力。

8.2 Neither the Company nor any of the Subsidiaries, nor any counterparty is in default of any Material Contract. The Seller is not aware of any circumstances that would mean that any unexecuted Material Contract would not be executed and performed by the parties to it.  
公司、其任何子公司及任何交易对手均不违反任何重大合同。若卖方不知悉任何情况，则意味着任何未签署的重大合同将不会被合同当事方签署及遵守。

9. **INSOLVENCY**  
**破产**

Neither the Company nor its Subsidiaries is insolvent or unable to pay its debts within the meaning of the insolvency legislation applicable to the company concerned and has stopped paying its debts as they fall due.  
公司及其子公司均不属于破产或资不抵债（相关定义见相关公司所适用的破产法律法规）的情况，且未停止支付其到期债务。

10. **ASSETS**  
**资产**

The assets included in the Accounts, together with any assets acquired since the Accounts Date and all other assets used by the Company or any of its Subsidiaries in connection with the Business (except for those disposed of since the Accounts Date in the normal course of the Business) are legally and beneficially owned by either the Company or a Subsidiary, and the relevant owner has good and marketable title to such assets.  
账簿中纳入的资产，连同任何于账簿日期后获得的任何资产以及公司或任何其子公司在业务过程中使用的所有其他资产（不包括于账簿日期后在正常业务过程中处置的资产）由公司或子公司合法拥有权益，相关所有权人对相关资产拥有适当所有权，该所有权可予转让。

11. **PLANT AND EQUIPMENT**  
**工厂和设备**

The plant, machinery, vehicles, office and other equipment used in connection with the Business are in good working order and have been regularly and properly maintained, capable, and will continue to be capable, of doing the work for which they were designed.  
业务过程中使用的工厂、机械、车辆、办公室和其他设备运行正常，定期维护且维护得当，能够且将继续能够执行其预期开展的工作。

12. **ENVIRONMENT AND HEALTH AND SAFETY**  
**环境、健康与安全**

12.1 The definitions in this paragraph apply in this agreement.  
本段中的定义适用于本协议。

**EHS Laws:** all applicable laws and legally binding codes of practice relating to the environment energy efficiency, climate change or the health and safety of any person.  
**环境、健康与安全法：**所有与环境、能源、效率、气候变化或任何个人的健康与安全相关的适用法律及具有法律约束力的行为守则。

**EHS Matters:** all matters relating to pollution or contamination of the environment; the presence, disposal, release, spillage, deposit, escape, discharge or emission of hazardous substances; the health and safety of any person; the existence of any adverse impact on the environment; or the condition, protection, maintenance, remediation, reinstatement, restoration or replacement of the environment.

**环境、健康与安全事项：**所有环境污染相关事项；有害物质的存在、处置、释放、溢出、存放、逸出、排出或排放；任何个人的健康和安全；任何不利环境影响的存在；或环境状况、保护、维护、整治、恢复、修复或替代。

**EHS Permits:** any permits, licences, consents, certificates, registrations, notifications or other authorisations required under any EHS Laws for the operation of the Business or in relation to any of the Properties.

**环境、健康与安全许可：**任何环境、健康与安全法在业务经营或任何财产方面要求的任何准许、许可、同意、证书、注册、通知或其他授权。

12.2 The Company and each of its Subsidiaries has obtained and complied at all times with all EHS Permits and which are in full force and effect.  
公司及其所有子公司均已取得并始终遵守所有具有充分效力的环境、健康与安全许可。



12.3 The Company and each of its Subsidiaries has at all times operated in compliance with all EHS Laws in force from time to time and there are no facts or circumstances that may lead to any breach of or liability under any EHS Laws or any claim or liability in respect of EHS Matters.  
公司及其所有子公司均始终以遵守所有不时生效的环境、健康与安全法的方式经营，且不存在可能导致违反任何环境、健康与安全法或该法律下的责任或环境、健康与安全事项方面的任何要求或责任的事实或情况。

13. **INTELLECTUAL PROPERTY**  
**知识产权**

13.1 The definition in this paragraph applies in this agreement.  
本段中的定义适用于本协议。

**Intellectual Property Rights:** patents, utility models, rights to inventions, copyright and neighbouring and related rights, moral rights, trademarks and service marks, business names and domain names, rights in get-up, goodwill and the right to sue for passing off or unfair competition, rights in designs, rights in computer software, database rights, rights to use, and protect the confidentiality of, confidential information (including know-how and trade secrets), and all other intellectual property rights, in each case whether registered or unregistered or forms of protection which subsist or will subsist now or in the future in any part of the world including the assignment to the Company of anything owned, licensed or beneficially owned by the Seller in relation to the activities of the Company on which the Company's current and future business may be reliant upon in the area of gas fired, coal fired and waste to energy electricity generation and water desalination technologies, practically owned in accordance with Chinese laws.

“**知识产权**”：专利权、实用新型专利权、发明权、版权及邻接权和相关权利、精神权利、商标权和服务标记权、商业名称和域名权、外观权、商誉及就假冒或不公平竞争起诉的权利、设计权、计算机软件权、数据库权、使用保密信息（包括专有技术和商业秘密）和对保密信息（包括专有技术和商业秘密）保密的权利以及所有其他知识产权。在前述每种情况下无论该知识产权是否已注册以及于当前或将来存在于全球任何地方的保护形式，包括任何与公司按照中国法律实际应拥有的当前或未来业务相关的领域如燃气发电，燃煤发电，垃圾发电和海水淡化等技术。

13.2 Complete and accurate particulars of the Intellectual Property Rights owned by the Company or any of its Subsidiaries have been Disclosed.  
已对公司或其任何子公司所有的知识产权的详情进行完整、准确披露。

13.3 Complete and accurate particulars have been Disclosed of all licences, agreements, authorisations and permissions under which the Company or any of its Subsidiaries uses or exploits Intellectual Property Rights owned by any third party; or has licensed or agreed to license Intellectual Property Rights to, or otherwise permitted the use of any Intellectual Property Rights by, any third party.

已对公司或其任何子公司使用或利用第三方所有的知识产权所依据的所有许可、协议、授权及准许的详情进行完整、准确披露；或已向任何第三方授予或同意向其授予知识产权许可，或允许任何第三方使用任何知识产权。

13.4 Without limiting the generality of the foregoing, the Company is the legal and beneficial owner, in accordance with Chinese laws, of all drawings and designs related with solar power (and all the other related intellectual properties) owned by the Company.,  
在不限制上述条款一般性的情况下，公司是按照中国法律对归属于公司所有的太阳能相关的图纸和设计（以及所有其它相关的知识产权）的合法和实益拥有人。

14. **INFORMATION TECHNOLOGY**  
**信息技术**

14.1 The definitions in this paragraph apply in this agreement.  
本段中的定义适用于本协议。

**IT Contracts:** all agreements under which any third party provides or will provide any element of, or services relating to, the IT System.  
**信息技术合同：**任何第三方提供或拟将提供信息技术系统的任何要素或信息技术系统相关服务所依据的所有协议。

**IT System:** all computer hardware (including network and telecommunications equipment), databases and software (including associated user manuals, object code and source code) owned, used, leased or licensed by or to the Company or any of its Subsidiaries.  
**信息技术系统：**公司或其任何子公司拥有、使用或向其租赁或授权的所有计算机硬件（包括网络和电信设备）、数据库和软件（包括相关用户手册、目标代码和源代码）。

14.2 The Seller has no reason to believe that any of the IT Contracts are not adequate for the purposes of the Business.  
卖方无任何理由相信，任何信息技术合同不足以用于业务目的。

14.3 The IT Contracts are valid and binding and no act or omission has occurred which would, if necessary with the giving of notice or lapse of time, constitute a breach of any such contract and there are and have been no claims, disputes or proceedings arising or threatened under any IT Contracts.  
信息技术合同有效且具有约束力，且未出现任何作为或不作为（若因通知的发出或随着时间的推移而有必要），构成任何相关合同下的违约，且不存在且始终不存在任何信息技术合同下产生或威胁产生的任何索赔、争议或诉讼。

15. **EMPLOYMENT**  
**聘用**

The name of each person who is a Director has been Disclosed to the Buyer together with every senior employee of the Company and their employment contracts have also been Disclosed.

已向买方披露所有董事以及公司所有高级员工的名字，且已披露其劳动合同。

16. **PROPERTY**  
**财产**

Details of each real estate property has been Disclosed. The value of all such properties that are owned by the Company is properly recorded in the Accounts. The amount of any lease payments for such properties not owned has also been properly recorded as part of the Overhead and also in the Accounts.

已披露所有不动产的详情。公司拥有的所有相关财产的价值均在账簿中进行适当记录。未拥有的财产的任何租赁付款金额亦已作为运营费用的一部分在账簿中进行适当记录。

17. **ACCOUNTS**  
**账簿**

17.1 The Accounts have been prepared in accordance with Chinese Accounting Standards and policies and practices generally-acknowledged in the PRC.  
账簿应使用中国公认会计准则、政策和惯例编制。

17.2 The Accounts have been audited by an auditor of good repute qualified and registered to act as auditors in PRC and the auditor has given an auditor's certificate without qualification.  
账簿已经由声誉良好、有资质的中国注册会计师进行审计，且该审计师已无条件出具审计师证明。

17.3 The Accounts (a) make proper and adequate provision or reserve for all bad debts and for depreciation on fixed assets; (b) do not overstate the value of current or fixed assets, (c) do not understate any liabilities (whether actual or contingent), (d) contain either provision adequate to cover, or full particulars in notes of, all Taxes (including deferred taxes) and other liabilities of the Company and of its Subsidiaries as at the Accounts Date and (e) full details as to the borrowings of the Company and its Subsidiaries.

账簿 (a) 对所有坏账和固定资产折旧均作出适当及充分拨备或储备；(b)未夸大流动或固定资产价值，(c) 未低估任何负债（无论实际或或有）(d) 载有为公司或其子公司截至账簿日期的所有税项（包括递延税项）及其他债务作出的充分拨备，或该等税项或债务的完整细节说明，和(e) 公司及其子公司借款的完整详情。

- 17.4 The Accounts give a true and fair view of the state of affairs of the Company and its Subsidiaries as at the Accounts Date and of the profit and loss of the Company and its Subsidiaries for the accounting period ended on the Accounts Date.  
账簿应真实及公允地反映公司及其子公司于账簿日期的状况及公司及其子公司截至账簿日期的会计期间的损益情况。
- 17.5 Since the Accounts Date the Company and each of its Subsidiaries has conducted its Business in the normal course and as a going concern and there has been no material adverse change in the turnover, financial position or prospects of the Company or any of its Subsidiaries.  
账簿日期后，公司及其所有子公司均持续正常开展业务，公司或其任何子公司在营业额、财务状况或前景方面均未经历重大不利变化。
- 17.6 All tax properly payable in the PRC has been paid to the appropriate authorities (except for any amount in genuine dispute).  
已向适当机关妥为支付在中国到期应付的所有税项（除任何有真正争议的金额）。

**SCHEDULE 3**

**附表三**

**DISCLOSURE SCHEDULE**

**披露表**

**1. DISCLOSURES REFERRED TO IN THE AGREEMENT**  
**本协议所述披露**

The contents of the documents referred to in this paragraph are deemed to be Disclosed and copies of all these documents are annexed to this Schedule and have been initialled by the parties for the purpose of identification:

本段所述文件内容视为已披露，且已在本附表中随附所有该等文件的副本。当事方已对文件副本进行首签，以便识别：

The following constitutional and corporate documents of the Company and its Subsidiaries:

以下为公司及其子公司的组织章程文件及公司文件：

- (a) The Accounts  
账簿
- (b) The Material Contracts  
重大合同
- (c) Employment Contracts  
劳动合同
- (d) Properties  
财产
- (e) Solar Power Property  
太阳能财产
- (f) The Legal Due Diligence Report  
合法尽职调查报告
- (g) The Asset Valuation Report  
资产评估报告

**2. [SPECIFIC DISCLOSURES AGAINST WARRANTIES]**  
**[对担保作出的特定披露]**

<b>Warranty against which the disclosure is made</b> <b>已披露的担保</b>	<b>Disclosure</b> <b>披露</b>
[SELLER TO COMPLETE] [卖方填写]	

SCHEDULE 4

附表四

GOVERNMENT CRITERIA

中国政府有关太阳能热发电验收技术条件

ICS \*\*\*\*

\* \*\*

CSEE

中国电机工程学会标准

T/CSEE XXXX-YYYY

太阳能热发电机组投产运行验收技术条件

- Specification for final acceptance for solar thermal power unit

(试行)

(征求意见稿)

XXXX - XX - XX发布

XXXX - XX - XX实施

中国电机工程学会 发布

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## 前 言

本标准按照《中国电机工程学会团体标准管理办法（暂行）》的要求，依据GB/T1.1-2009《标准化工作导则 第1部分：标准的结构和编写》的规则起草。

本标准的某些内容可能涉及专利。本标准的发布机构不承担识别这些专利的责任。

本标准由中国电机工程学会提出。

本标准由中国电机工程学会太阳能热发电专业委员会技术归口并解释。

本标准起草单位：电力规划设计总院、西安交通大学、中国电力科学研究院有限公司、西安热工研究院有限公司、华北电力科学研究院有限责任公司、中国广核新能源控股有限公司、浙江中控太阳能技术有限公司、西北电力设计院有限公司、兰州大成聚光能源科技有限公司、北京兆阳光热技术有限公司。

本标准主要起草人：\*\*、\*\*、\*\*、\*\*、\*\*、\*\*、\*\*、\*\*、\*\*、\*\*。

本标准首次发布。

本标准在执行过程中的意见或建议反馈至中国电机工程学会标准执行办公室（地址：北京市西城区白广路二条1号，100761，网址：<http://www.csee.org.cn>，邮箱：[cseebz@csee.org.cn](mailto:cseebz@csee.org.cn)）。



## 太阳能热发电机组投产运行验收技术条件

## 1 范围

本标准规定了太阳能热发电机组投产运行验收应达到的技术条件。

本标准适用于新建、改建及扩建的槽式、塔式、线性菲涅尔式太阳能热发电机组投产运行验收。

## 规范性引用文件

下列文件对于本文件的应用是必不可少的。凡是注日期的引用文件，仅注日期的版本适用于本文件。凡是不注日期的引用文件，其最新版本（包括所有的修改单）适用于本文件。

GB/T 31464-2015 电网运行准则  
 GB 50150-2016 电气装置安装工程电气设备交接试验标准  
 GB 50229 火力发电厂与变电站设计防火规范  
 DL/T 612-2017 电力行业锅炉压力容器安全监督规程  
 DL/T 5190.1~9-2012 电力建设施工及验收技术规范  
 DL/T 5294-2013 火力发电建设工程调试技术规范  
 DL/T 5437-2009 火力发电建设工程启动试运及验收规程  
 ISO 4406 液压传动

## 术语和定义

下列术语和定义适用于本文件。

太阳能热发电机组 solar thermal power unit

将太阳能转换为热能，通过热功转换过程实现并网发电的工程实体，由聚光集热系统、储热系统、蒸汽发生系统、汽轮机、发电机及附属辅助系统构成。

真空集热管 evacuated collector tube

在透明管(通常为玻璃管)和吸热体之间有真空空间的、吸收太阳辐射并将产生的热能传递给传热工质的部件。

熔盐储热系统 molten salt thermal energy storage system

使用熔盐类储热材料存储和利用热能的系统。

固体储热系统 solid thermal energy storage system

使用固体储热材料存储和利用热能的系统，包括耐高温混凝土或其他固体蓄热材料作为储热介质的热储存系统。

固体混凝土储热系统 (Solid concrete thermal energy storage system)

使用耐高温混凝土作为储热介质的热储存系统，属于固体储热系统的一类。

发电能力 power generation capacity

发电机组/发电站在一段时间内的电力生产能力，包括发电量、发电功率上下限等。

基本规定

4.0.1 太阳能热发电机组投产运行验收，必须以现行的国家法律、法规和强制性标准、电力行业有关标准、以及工程的批准文件、设计图纸、有效合同等为依据。

4.0.2 太阳能热发电机组投产运行验收前，应按DL/T 5190.1~9及太阳能热发电相关要求完成太阳能热发电工程建筑与工艺系统安装工作，验收合格且已办理质量验收手续。

4.0.3 太阳能热发电机组投产运行验收前，应按 DL/T 5437和 DL/T 5294 要求完成单机试运、分系统试运和整套启动试运工作，由于太阳能热发电与常规火力发电特性不同而不宜采用 DL/T 5437和 DL/T 5294部分条款、以及DL/T 5437和 DL/T 5294未作要求时，应满足本标准要求。

4.0.4 太阳能热发电机组投产运行验收前，应按照 GB/T 31464和GB 50150要求完成电气设备交接验收试验和涉网特殊试验项目，满足机组并网运行要求。

4.0.5 太阳能热发电机组投产运行验收前，应实现本标准要求的机组投产运行验收考核工况，达到本标准要求的机组投产运行验收技术要求。

聚光集热系统

槽式太阳能热发电聚光集热系统

## 投产运行验收基本条件

- 1) 集热系统安装完成，吹扫、密封性试验和压力试验完成。
- 2) 现场管道、球形链接、阀门保温齐全，保温表面温度符合设计要求。
- 3) 安全阀、表计校验合格，具有校验报告。
- 4) 各测点、阀门、挡板、开关验收及联锁保护逻辑传动试验完成。
- 5) 集热器完成调整的数量应能满足机组投产运行验收考核工况及技术指标要求。
- 6) 集热器传热介质品质合格，具有由第三方单位出具的化验报告。
- 7) 液压驱动用润滑油质符合设计要求，且油脂等级不低于ISO 4406中21/18/13的规定。
- 8) 投产运行验收前应具备保持集热器反射镜和集热管清洁的措施。
- 9) 系统调试验收完毕，施工及调试记录与资料齐全。

## 投产运行验收技术要求

- 1) 反射镜光学效率验收合格，各项误差符合表5.1.2-1的要求。

2) 表5.1.2-1

项目	标准	单位	备注
反射镜面型误差	≤1.9	%	
反射镜安装点位置误差	≤0.8	mm	
反射镜安装点角度误差	≤1.0	度	
集热管位置误差	≤4.0	mm	
模块一致性误差	≤1.0	mm	
支架变形(无风载荷下)误差	≤1.0	mm	
跟踪精度误差	≤1.0	mrad	
太阳散角误差	≤3.5	度	

- 3) 球形链接保温装置符合设计要求、安装精度符合设计要求。
- 4) 球形链接泄漏率≤0.05%。
- 5) 真空集热管吸热和散热性能符合技术协议要求；其玻璃外管及不锈钢吸热管外观无损伤、无异常，安装符合设计要求。
- 6) 集热器回路主要管道符合施工图设计；支吊架齐全，膨胀自如；保温良好且符合设计要求。
- 7) 集热器回路进、出口压力符合设计要求，安全阀动作压力整定值符合设计要求。
- 8) 聚光集热系统控制系统完成调试，联锁保护全部投入、动作正常。
- 9) 聚光集热系统可在各种发电模式下正常运行，并可按设计实现各种发电模式的正常切换。
- 10) 聚光集热系统出口传热介质参数达到设计要求，其连续出力满足机组投产运行验收考核工况及技术指标要求。

#### 塔式太阳能热发电聚光集热系统

##### 投产运行验收基本条件

- 1) 定日镜场中完成安装调试和校正的定日镜数量应不少于定日镜总数的90%。
- 2) 定日镜场的电气系统、保安或备用电源应完成安装、调试，定日镜场应完成接地防雷测试。
- 3) 定日镜场控制系统及软件应完成安装、调试。
- 4) 吸热器管屏、吸热系统上升管、下降管、缓冲罐材质应符合设计值或技术协议要求。
- 5) 吸热器管道尺寸、管径、管道间缝隙应符合设计值或技术协议要求。
- 6) 吸热系统应完成全部设备、管道、阀门、电气、仪控、电伴热和保温材料的安装。
- 7) 吸热系统及管道应完成单体调试、整体密封性试验和水压试验。
- 8) 吸热系统管道及设备应已完成吹扫。
- 9) 吸热系统仪表和阀门、控制和保护系统应完成调试，且无故障工作正常。
- 10) 吸热器测温仪及吸热器光学监控系统应完成安装、调试，且无故障工作正常。
- 11) 吸热器防止光斑溢出超温的安全防护设施已验收合格。
- 12) 吸热器预热系统、压缩空气系统应完成全部安装、调试。
- 13) 太阳辐射仪或气象监测系统应完成安装、调试。
- 14) 系统调试验收完毕，施工及调试记录与资料齐全。

##### 投产运行验收技术要求

- 1) 聚光集热系统应满足安全可靠运行的要求。
- 2) 聚光集热系统应满足设计点热功率要求。
- 3) 聚光集热系统应完成开场、追日、关场及各工况条件的保护试验调试。
- 4) 定日镜应满足最大生存风速下和最大工作风速下的技术要求。
- 5) 投运定日镜的采光面积应符合设计值或技术协议要求。
- 6) 定日镜防护等级应符合设计值或技术协议要求。
- 7) 定日镜的跟踪精度的均值和方差应符合设计值或技术协议要求。
- 8) 定日镜在吸热器上的反射光斑的形状尺寸应符合设计值或技术协议要求。
- 9) 定日镜场的控制系统应实现定日镜自动追日、定日镜操作调度、定日镜校正、追日数据存储、定日镜紧急散焦、吸热器温度异常报警、吸热器监控、故障诊断及气象预测的功能。
- 10) 镜场清洗系统应在各天气工况条件下符合清洗速率和清洗效果的技术要求。
- 11) 聚光集热系统应完成安全和联锁保护逻辑试验，连锁保护功能应符合设计值或技术协议要求。
- 12) 在主供电电源失电条件下，定日镜场供电系统应保障定日镜场紧急散焦时间满足聚光集热系统安全要求。
- 13) 聚光集热系统应完成保安电源切换试验。

#### 线性菲涅耳式太阳能热发电聚光集热系统

## 熔盐工质聚光集热系统

### 投产运行验收基本条件

- 1) 聚光集热系统建设规模满足机组投产运行验收要求。
- 2) 聚光集热系统各组件（阀门、仪器仪表、电伴热、保温等）已安装完成。
- 3) 聚光集热系统设备、熔盐管道以及集热管路水压试验已完成。
- 4) 聚光集热系统热工测量、控制和集热跟踪控制系统的调试试验已完成。
- 5) 聚光集热系统相关电气系统施工、调试完毕。
- 6) 太阳辐射仪或气象监测系统完成安装、调试。
- 7) 系统调试验收完毕，施工及调试记录与资料齐全。

### 投产运行验收技术要求

- 1) 集热管热膨胀滑动机构设计达到设计要求。
- 2) 聚光集热系统防凝试验已完成，具备投运条件。
- 3) 聚光集热系统保安电源系统完成切换试验，满足设计要求。
- 4) 聚光集热系统反射镜散焦/归位功能试验合格。
- 5) 聚光集热系统安全保障控制（包括预热、疏盐、过热保护）功能试验已完成，达到设计要求。
- 6) 聚光集热系统与储换热系统完成热态联调，聚光集热系统可连续可靠运行，传热介质流量、温度参数达到设计范围。

## 水工质聚光集热系统

### 投产运行验收基本条件

- 1) 聚光集热系统各设备，包括汽水分离器、换热器、喷水减温器设备安装完毕，单机试运已完成并经验收合格。
- 2) 聚光集热系统设备及管道系统的水压试验已完成。
- 3) 聚光集热系统管道及设备吹扫已完成。
- 4) 聚光集热系统热工测量、控制和保护系统的调整试验工作已完成。
- 5) 聚光集热系统相关电气系统施工、调试完毕。
- 6) 太阳辐射仪或气象监测系统施工、调试完毕。
- 7) 系统调试验收完毕，施工及调试记录与资料齐全。

### 投产运行验收技术要求

- 1) 一次反射镜跟踪精度测试完成，符合设计要求。
- 2) 一次反射镜控制系统功能及性能测试完成，符合设计要求。
- 3) 集热管温度检测系统工作测试完成，符合设计要求。
- 4) 集热管过热保护功能测试完成，符合设计要求。
- 5) 具有集热管膨胀报警装置的吸热器报警系统功能验证测试完成，符合设计要求。
- 6) 具有防风自动转动功能的系统进行功能的模拟测试，其反应灵敏度、运转速度、停止位置准确度等指标应符合设计要求。
- 7) 聚光集热系统紧急散焦功能试验合格。
- 8) 聚光集热系统安全和联锁保护逻辑试验完成。
- 9) 聚光集热系统保安电源切换试验完成。
- 10) 聚光集热系统回路膨胀量满足设计范围。
- 11) 集热器各回路聚光端边损失满足设计值范围。
- 12) 聚光集热系统蒸汽严密性试验合格并办理签证。
- 13) 聚光集热防冻系统功能测试完成，符合设计要求。
- 14) 聚光集热系统安全阀调整已完成。
- 15) 聚光集热系统保安电源已验收合格。
- 16) 聚光集热系统正常产汽。

## 储热系统

### 熔盐储热系统

#### 投产运行验收基本条件

- 1) 熔盐储罐完成安装和保温工程，满足安全稳定运行技术要求。
- 2) 熔盐完成初始熔化后的温度和液位应达到设计值或技术协议要求。
- 3) 熔盐储热系统平台扶梯、钢架及管道应满足安全、可靠运行的技术要求。
- 4) 熔盐储热系统的管道、阀门、电气、仪表、电伴热应全部完成安装、调试。
- 5) 阀门通过水压试验和泄漏试验。
- 6) 冷盐罐、热盐罐的罐体热膨胀和基础沉降等数据应记录备案，并满足安全稳定运行要求。
- 7) 熔盐储热系统的控制和保护系统应无故障运行，工作正常。
- 8) 冷热熔盐泵及调温泵应无故障运行，工作正常。
- 9) 氮气系统连续正常运行，熔盐系统氮封正常（导热油槽式聚光集热系统）。
- 10) 熔盐储罐基础通风系统连续正常运行。
- 11) 熔盐储罐电加热器可正常投运。
- 12) 熔盐储热系统调试验收完毕，施工及调试记录与资料齐全。

#### 投产运行验收技术要求

- 1) 熔盐重量、材料成分及纯度应符合设计值或技术协议要求。
- 2) 冷热熔盐泵功能应符合设计值或技术协议要求，并通过全运行范围试运和性能试验，熔盐泵功能应符合流量/压头、流量/能耗、流量/效率、流量/NPSH等图表。
- 3) 充热模式下连续运行，冷熔盐泵及熔盐换热器的运行功率及介质参数达到设计值或技术协议要求（导热油槽式聚光集热系统）。
- 4) 放热模式下连续运行，热熔盐泵及熔盐换热器的运行功率和介质参数达到设计值或技术协议要求（导热油槽式聚光集热系统）。
- 5) 熔盐储罐电加热器功能应符合设计值或技术协议要求，并通过全运行范围试运和性能试验。
- 6) 仪表及控制设备应符合设计值或技术协议要求。
- 7) 冷热盐罐的基础混凝土温度应符合设计值或技术协议要求。
- 8) 冷热盐罐的泄漏检测点温度或其它泄漏检测指标应符合设计值或技术协议要求。
- 9) 冷热盐罐进盐时的壁温温升速率和温差应符合设计值或技术协议要求。
- 10) 熔盐换热器换热效率及储热系统功能总换热效率应符合设计值或技术协议要求。

### 固体混凝土储热系统

#### 投产运行验收基本条件

- 1) 固体混凝土储热系统各设备安装完毕，单机试运已完成并经验收合格，施工、调试记录及资料齐全。
- 2) 固体混凝土储热系统单体调试已完成。
- 3) 固体混凝土储热系统设备及管道系统的水压试验已完成。
- 4) 固体混凝土储热系统的高压上水取热管道、疏放水管道及储热模块化学清洗已完成。
- 5) 固体混凝土储热系统的储热蒸汽管道、主蒸汽管道、再热蒸汽管道及储热模块蒸汽吹管已完成。
- 6) 固体混凝土储热系统热工测量、控制和保护系统的调整试验工作已完成。
- 7) 固体混凝土储热系统相关电气系统施工、调试完毕。
- 8) 固体混凝土储热系统安全阀调整已完成。
- 9) 固体混凝土储热系统单体调试已完成。
- 10) 固体混凝土储热系统投入运行前已完成烘干。
- 11) 固体混凝土储热系统正常产汽。

### 投产运行验收技术要求

- 1) 固体混凝土储热系统及管道保温性能测试完成，散热功率符合设计要求。
- 2) 地基冷却系统调整试验完成，温度控制范围符合设计要求。
- 3) 固体混凝土储热系统各储热模块切换响应时间符合设计要求。
- 4) 固体混凝土储热系统各储热模块取热切换试验完成，响应时间符合设计要求。
- 5) 固体混凝土储热系统各储热模块储热功率符合设计要求；
- 6) 固体混凝土储热系统各储热模块取热功率符合设计要求；
- 7) 凝结循环水泵系统性能符合设计要求；
- 8) 给水、减温、疏水、排空及排污等系统的性能指标符合设计要求。

### 蒸汽发生系统

#### 投产运行验收基本条件

- 1) 蒸汽发生系统的预热器、蒸发器、汽包、过热器和再热器等承压设备应具有符合DL/T 612要求的出厂资料和产品铭牌，技术文件齐全。
- 2) 蒸汽发生系统各设备，包括预热器、蒸发器和汽包、过热器、再热器及辅助设备安装、调试验收完毕，施工及调试记录与资料齐全。
- 3) 蒸汽发生系统设备及管道系统的水压试验已完成。
- 4) 蒸汽发生系统化学清洗已完成。
- 5) 蒸汽发生系统管道及设备吹扫已完成。
- 6) 蒸汽发生系统仪表控制系统表计校验合格。
- 7) 蒸汽发生系统导热油/熔盐电伴热系统安装调试完毕，可正常投运。
- 8) 启动给水电加热器安装调试完毕，可正常投运（设有启动给水电加热器的蒸汽发生系统）。

#### 投产运行验收技术要求

- 1) 蒸汽严密性试验完成，试验结果符合行业标准规定。
- 2) 安全阀调整完成，安全阀动作压力值满足设计要求。
- 3) 仪表控制系统的各种控制保护、逻辑连锁试验完成，试验结果符合设计要求。
- 4) 机组启动过程中启动给水电加热器正常投运，启动给水电加热器进出口介质参数应在规定时间内达到设计要求，启动给水电加热器出力满足机组启动过程的基本要求（设有启动给水电加热器的蒸汽发生系统）。
- 5) 蒸汽发生系统正常投运，典型工况下各换热器汽水侧、油/盐侧进出口参数应符合设计要求，蒸汽发生系统出力能达到机组满负荷运行要求。

### 汽轮发电机组及其附属系统

#### 投产运行验收基本条件

- 1) 汽轮机及辅助系统、发电机及辅助系统、热工控制系统、电气系统、化学设备及系统等安装完毕，单体试运已完成并经验收合格。
- 2) 辅助蒸汽和轴封系统蒸汽管道吹扫已完成。
- 3) 润滑油、控制油系统连锁保护试验已完成。
- 4) 汽轮机高、中压主汽阀、调节汽阀和逆止阀关闭时间满足标准要求。
- 5) 汽轮机旁路连锁保护及自动功能试验完成。
- 6) 电气系统静态试验，二次回路核查及传动试验已完成。
- 7) 热工控制系统逻辑、联锁、保护、静态仿真、传动及联调试验已完成。
- 8) 汽轮机、发电机及辅助系统已全部投运，并能连续稳定运行。
- 9) 系统调试验收完毕，施工及调试记录与资料齐全。

#### 投产运行验收技术要求

#### 汽轮机系统与设备应完成如下试运和试验项目

- 1) 危急保安器就地及远方打闸试验。
- 2) 启动油泵与同轴主油泵切换试验。
- 3) 润滑油压调整。
- 4) 高、中压主汽阀和调节汽阀严密性试验。
- 5) 危急保安器充油试验。
- 6) 真空低在线跳闸保护试验。
- 7) 润滑油压低在线跳闸保护试验。
- 8) 备用油泵在线启动试验。
- 9) 超速保护控制（OPC）试验。
- 10) 超速跳闸保护（即电气超速保护）试验。
- 11) 机械超速试验。
- 12) 进汽方式转换试验。
- 13) 惰走时间测试。

- 14)主汽阀、调节汽阀在线活动试验。
- 15)汽轮发电机组带满负荷试验。
- 16)甩负荷试验。
- 17)真空严密性试验。
- 18)温态、热态、极热态启动试验。
- 19)汽轮发电机组振动监测。
- 20)调速系统参数测试及建模试验。

#### 电气系统与设备应完成如下试验项目

- 1) 主变及高厂变系统充电试验。
- 2) 发电机励磁系统相频、幅频特性试验。
- 3) 发变组短路特性试验。
- 4) 发电机空载特性试验。
- 5) 励磁系统闭环试验。
- 6) 零起升压试验。
- 7) 假同期试验。
- 8) 厂用电源切换试验。
- 9) 发电机变压器组保护带负荷试验。
- 10)发电机变压器组测量及监控系统带负荷试验。
- 11)发电机励磁系统带负荷试验。
- 12)励磁系统负载阶跃试验。
- 13)励磁系统的静差率测试试验。
- 14)发电机调差系数整定试验。
- 15)系统电抗 $X_e$ 计算试验。
- 16)PSS功能整定试验。
- 17)发电机温升试验。
- 18)自动化系统在线(RTU)测试试验。
- 19)自动电压控制(AVC)装置试验。
- 20)发电机进相试验。
- 21)甩负荷试验。

#### 热控系统应完成如下试运和试验项目

- 1) 汽轮机液压控制系统调整试验。
- 2) 模拟量控制系统调整试验。
- 3) 机组AGC性能试验。
- 4) 机组一次调频试验。

#### 化学系统与设备应达到的技术条件

- 1) 给水、蒸汽、凝结水回收、发电机冷却水等汽水品质应合格。
- 2) 在线化学仪表，凝结水精处理系统已正常投运。

#### 其他系统

## 电伴热系统

### 投产运行验收基本条件

- 1) 电伴热电缆应带有厂名、型号、规格、电压等级、长度、认证标志等标签。
- 2) 电伴热发热线和冷端线应表面光亮，冷热端连接和引线连接应完整无瑕疵。
- 3) 电伴热和保温应完成安装，且通过绝缘电阻测试。
- 4) 电伴热及所属温控系统调试验收完毕，施工及调试记录与资料齐全。

### 投产运行验收技术要求

- 1) 电伴热发热芯、绝缘层和保护套材质应符合设计值或技术协议要求。
- 2) 电伴热绝缘电阻应符合设计值和技术协议要求。
- 3) 电伴热加热功率和加热电阻应符合设计值或技术协议要求。
- 4) 电伴热的加热的功率、时间及加热均匀性功能应符合设计值或技术协议要求。

## 天然气防凝系统

### 投产运行验收基本条件

- 1) 天然气防凝系统安装完成。
- 2) 天然气防凝系统防火、防爆设计符合现行GB 50229的规定。
- 3) 天然气压力容器、管道、安全阀检验合格，供气系统运行正常，压力符合设计要求。
- 4) 现场管道、阀门保温齐全，保温表面温度符合设计要求。
- 5) 系统表计校验合格，各测点、阀门、挡板、开关验收及联锁保护逻辑传动试验完成。
- 6) 系统调试验收完毕，施工及调试记录与资料齐全。

### 投产运行验收技术要求

- 1) 燃气锅炉出力符合锅炉铭牌规定和设计要求，具备连续运行条件，满足机组生产需求。
- 2) 供气系统运行正常，满足主机组安全运行。
- 3) 燃烧系统燃烧稳定，火焰检测正常。
- 4) 燃气锅炉可燃气体检测仪安装位置符合GB 50229要求，试验检测运行正常。
- 5) 烟气在线检测系统运行正常，各项指标符合环保要求。

## 氮气系统

### 投产运行验收基本条件

- 1) 氮气系统安装完成。
- 2) 氮气系统管道吹扫完成。
- 3) 压力容器、管道、安全阀检验合格。
- 4) 现场管道、阀门保温齐全，保温表面温度符合设计要求。
- 5) 系统表计校验合格，各测点、阀门、挡板、开关验收及联锁保护逻辑传动试验完成。
- 6) 系统调试验收完毕，施工及调试记录与资料齐全。

### 投产运行验收技术要求

- 1) 制氮系统具备连续生产能力，其出力满足全系统氮气需求。
- 2) 安全阀整定值符合设计要求。
- 3) 氮气纯度 $\geq 99.99\%$ 、含氧量 $\leq 3\%$ ，氮气压力符合设计要求。
- 4) 液氮系统压力、气化出力、电加热系统符合设计要求。

#### 发电功率预测系统

#### 投产运行验收基本条件

光热发电站应配置发电功率预测系统，系统应具备0h~4h超短期光热发电能力预测和0h~72h短期光热发电能力预测功能。

#### 投产运行验收技术要求

- 1) 储热型光热发电站应每天按照电网调度机构规定的时间上报次日0时起0h~72h光热发电站发电功率曲线建议，时间分辨率为15min。
- 2) 储热型光热发电站应每15min自动向电网调度机构滚动上报未来0h~4h的光热发电站发电能力，包括未来4h的预期累计发电量、累计储热量以及未来0h~4h的发电功率曲线建议，时间分辨率为15min。

#### 机组投产运行验收考核试运要求

太阳能热发电机组投产运行验收前，聚光集热系统、储热系统、蒸汽发生系统、汽轮发电机组及其附属系统、电伴热、防凝、氮气与发电功率预测等其他系统应已全部完成试运并能满足机组连续稳定运行的要求，太阳能热发电机组完成72小时连续试运且达到如下要求：

- 1) 机组应连续运行72小时。
- 2) 机组72小时连续运行期间，额定负荷下连续运行时间不少于2小时。
- 3) 发电机达到铭牌额定功率值。
- 4) 机组达到额定参数。
- 5) 热控保护投入率100%。
- 6) 热控自动装置投入率不小于95%、热控协调控制系统投入，且调节品质基本达到设计要求。
- 7) 热控测点/仪表投入率不小于99%，指示正确率分别不小于98%。
- 8) 电气保护投入率100%。
- 9) 电气自动装置投入率100%。
- 10) 电气测点/仪表投入率不小于99%，指示正确率分别不小于98%。
- 11) 汽水品质合格。



附录 A  
(资料性附录)

槽式聚光集热系统投产运行验收表

工程名称		机组号	
系统名称		聚光集热系统	
验收项目		验收标准	验收结果
			备注
液压 驱动 装置	润滑油质	符合国标要求	
	通讯回路	符合设计要求	
	联锁保护	全部投入、动作正常	
	控制系统	符合设计要求	
球形 链接	泄漏率	误差 $\leq 0.05$	
	保温装置	符合设计要求	
	安装精度	符合设计要求	
集热 器组 件及 回路	状态显示	正确	
	调节阀、排污阀	无泄漏	
	主要管道	支吊架齐全，膨胀自如，保温良好	
	保温	符合设计要求	
	安全阀动作压力	整定值符合设计要求	
	热工仪表	安装齐全、校验准确	
	联锁保护	全部投入、动作正常	
真空 集热 管	进、出口压力	符合设计要求	
	真空玻璃管	玻璃无破碎或划痕、真空良好、防反射涂层无损伤；玻璃管和不锈钢吸收管之间无任何液体	
	防护罩	安装位置正确，完整	
	不锈钢吸收管	吸收管涂层完成、管道无弯曲	
	接头	能自由移动	

塔式聚光集热系统投产运行验收表

工程名称			机组号
系统名称	聚光集热系统		
验收项目	验收标准	验收结果	备注
镜场可用率	满足设计值		
镜子反射率	满足设计值		
跟踪准确度	满足设计值		
定日镜反射光斑形状尺寸	满足设计要求		
定日镜转速	满足设计值		
镜场散焦时间	≤20s		
单面镜子清洗耗水量	满足设计值		
从任何位置恢复到保护姿态所需的时间	满足设计值		
吸热器设计出口熔盐温度	满足设计值		
吸热器管道尺寸、管径、管道间缝隙	满足设计要求		
吸热器本体额定负荷流阻	满足设计值		
吸热器热效率(额定工况)	满足设计值		
吸热器的额定输出热功率	满足设计值		
定日镜场备用电源试验	满足设计值		

线性非涅耳熔盐工质聚光集热系统投产运行验收表

工程名称			机组号
系统名称	聚光集热系统		
验收项目	验收标准	验收结果	备注
聚光集热系统完整性	建设完成设计的规模 聚光集热系统的各组件安装完整		
防凝防护措施	达到设计要求		
安保电源系统	达到设计要求		
集热回路集热性能	传热介质流量、温度等参数达到设计范围		
安全控制功能	预热、疏盐、过热保护、伴热、反射镜散焦/归位等控制达到设计要求		

线性菲涅耳水工质聚光集热系统投产运行验收表

工程名称		机组号	
系统名称	聚光集热系统		
验收项目	验收标准	验收结果	备注
镜场可用率	满足设计值		
一次反射镜反射率	满足设计值		
二次反射镜反射率	满足设计值		
驱动跟踪准确度	满足设计值		
一次反射镜驱动转速	满足设计值		
二次反射镜散焦时间	满足设计值		
集热系统回路膨胀量	满足设计值		
集热系统各回路聚光端边损失	满足设计值		
集热系统各回路流量	满足设计值		
防风保护所需时间	满足设计值		
蒸发段设计出口蒸汽温度	满足设计值		
过热段设计出口蒸汽温度	满足设计值		
CPC吸热器热效率(额定工况)	满足设计值		
CPC吸热器的额定输出热功率	满足设计值		
镜场备用电源试验	满足设计值		

熔盐储热系统投产运行验收表

工程名称		机组号	
系统名称	熔盐储热系统		
验收项目	验收标准	验收结果	备注
储热容量	满足设计值		
冷罐散热损失	满足设计值		
热罐散热损失	满足设计值		
熔盐成分	满足设计值		
冷盐罐工作温度	满足设计值		
热盐罐工作温度	满足设计值		
储罐焊接拍片	满足设计值		

固体混凝土储热系统投产运行验收表

工程名称		机组号	
系统名称	固体混凝土储热系统		
验收项目	验收标准	验收结果	备注
储热容量	满足设计值		
混凝土热膨胀量	满足设计值		
混凝土储热日温降	满足设计值		
储热效率	满足设计值		
取热效率	满足设计值		
不同取热单元切换时间	满足设计值		
蒸汽发生系统压降	满足设计值		
蒸汽发生系统最大连续蒸发量	满足设计值		

蒸汽发生系统投产运行验收表

工程名称		机组号	
系统名称	蒸汽发生系统		
验收项目	验收标准	验收结果	备注
化学清洗	提供签证		
水压试验	提供签证		
管道及设备吹扫	提供签证		
仪表控制系统表计检定或校准	校验合格，具有校验报告		
蒸汽严密性试验	提供签证		
安全阀调整	提供签证		
控制保护、逻辑连锁试验	试验结果符合设计要求		
蒸汽发生系统参数	典型工况下各换热器汽水侧、油/盐侧进出口参数符合设计要求		
蒸汽发生系统出力	出力达到机组满负荷运行要求		

其他系统投产运行验收表

工程名称		机组号	
其他系统			
系统名称	验收项目	验收标准	验收结果
电伴热系统	材质	符合设计要求	
	加热功率和加热电阻	符合设计值	
	绝缘电阻	符合设计值	
	布置安装位置和功率	符合设计要求	
天然气防凝系统	主要参数	蒸汽压力、温度、出力符合设计要求	
	燃烧系统	燃烧稳定，火焰检测正常	
	送风系统	运行正常	
	供气系统	运行正常，风门调节良好	
	转动机械	风压、风量、温度、振动、电流均符合设计要求	
氮气系统	管道系统	无杂物、无泄漏，阀门及安全阀工作正常	
	氮气品质	纯度、含氧量、氮气压力符合设计要求	
	增压机	振动和电流符合设计要求	
	液氮系统	运行正常，各参数符合设计要求	

汽轮发电机组投产运行验收表

工程名称		机组号	
系统名称	汽轮发电机组		
验收项目	验收标准	验收结果	备注
机组连续运行小时	≥72		
连续满负荷运行小时 (平均负荷率不小于90%机组额定负荷)	≥2		
发电机功率	达到铭牌额定功率		
机组参数	达到额定		
热控保护投入率	100%		
热控自动装置投入率	≥95%		
热控测点/仪表投入率	≥99%		
电气保护投入率	100%		
电气自动装置投入率	100%		
电气测点/仪表投入率	≥99%		
汽水品质	合格		

# 太阳能热发电机组投产运行验收技术条件

编 制 说 明

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2 编制主要原则	2
3 与其他标准文件的关系	2
4 主要工作过程	2
5 标准结构和内容	3

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## 1 编制背景

本标准按照《中国电机工程学会团体标准管理办法（暂行）》的要求，依据GB/T 1.1—2009《标准化工作导则 第1部分：标准的结构和编写》的规则起草。

本标准编制背景：火力发电工程启动试运与验收工作目前主要依据《火力发电建设工程启动试运及验收规程》（DL/T 5437-2009）进行，《火力发电建设工程启动试运及验收规程》对太阳能热发电机组启动试运与验收工作具有指导作用。但太阳能热发电机组在系统组成、试验要求与投产运行条件等方面与常规火力发电机组存在较大的区别，因此《火力发电建设工程启动试运及验收规程》不能完全适用。为指导太阳能热发电机组的启动试运与验收工作，规范太阳能热发电机组投产运行验收前应完成的调试项目和应达到的基本要求，制定本标准。

## 2 编制主要原则

本标准主要根据以下原则编制：

1. 本标准涵盖新建、改建及扩建的槽式、塔式、线性菲涅尔式太阳能热发电机组；
2. 本标准参照最新国家标准、行业标准，并结合太阳能热发电机组实际情况，明确太阳能热发电机组投产运行验收前应完成的调试项目和应达到的基本要求。

## 3 与其他标准文件的关系

本标准与相关技术领域的国家现行法律、法规和政策保持一致。

本标准应与《火力发电建设工程启动试运及验收规程》一起配合使用，太阳能热发电机组启动试运及验收阶段工作应符合《火力发电建设工程启动试运及验收规程》要求，《火力发电建设工程启动试运及验收规程》未涵盖或因太阳能热发电机组的特殊性不宜采用《火力发电建设工程启动试运及验收规程》的部分条款时，应满足本标准要求。

本标准不涉及专利、软件著作权等知识产权问题。

## 4 主要工作过程

2018年6月～8月：项目启动，成立编写小组，编写标准大纲；

2018年9月～12月：各参编单位梳理太阳能热发电机组启动试运及验收应完成的工作，确定太阳能热发电机组投产运行验收应达到的技术条件；

2019年1月～6月：各参编单位编写《太阳能热发电机组投产运行验收技术条件》初稿，统稿；

2019年7月～8月：修改形成征求意见稿；

2019年9月～2019年10月：征求意见、专家审核；

2019年10月～2019年11月：标准修改完善，形成送审稿；

2019年12月：规程复审、验收。

## 5 标准结构和内容

本标准分为10个章节，依次为“范围”、“规范性引用文件”、“术语和定义”、“基本规定”、“聚光集热系统”、“储热系统”、“蒸汽发生系统”、“汽轮发电机组及其附属系统”、“其它系统”和“机组投产运行验收考核试运要求”。第5到第9章分别为太阳能热发电机组投产运行验收时“聚光集热系统”、“储热系统”、“蒸汽发生系统”、“汽轮发电机组及其附属系统”及“其它系统”应达到的技术条件，第10章为机组投产运行验收考核试运要求。

附录A为资料性附录。

Signed by  
签字人

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for and on behalf of **Beijing Shouhang IHW Resources  
Saving Technology Company Ltd.**  
为及代表北京首航艾启威节能技术股份有限公司

Director  
董事

Signed by  
签字人

.....

for and on behalf of **Pacific Green Technologies Inc.**  
为及代表太平洋绿色技术股份有限公司

Director  
董事

**DATED** \_\_\_\_\_ **2019**

日期：2019年

**Liu Tao and Liang Qi**  
刘涛和梁旗

as Sellers  
卖方

**Pacific Green Technologies Inc.**  
太平洋绿色技术股份有限公司

as Buyer  
买方

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**SHARE PURCHASE AGREEMENT**  
股权购买协议

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This agreement is dated \_\_\_\_\_ 2019

本协议日期为2019年\_\_\_\_\_。

## PARTIES

### 协议双方

(1) **Liu Tao (Mr Liu) and Liang Qi (Ms Liang)** (together, Mr Liu and Ms Liang, the **Sellers**).

刘涛 (刘先生) 和梁旗 (梁女士) (刘先生和梁女士一起作为卖方)。

(2) **Pacific Green Technologies Inc.** incorporated and registered in Delaware and whose registered office is at 8 The Green, Suite #10212, Dover, Delaware 19901, USA (**Buyer**).

太平洋绿色技术股份有限公司，一家在特拉华州注册并成立的公司，其注册地址为美国特拉华州多佛市The Green 8号10212室，邮编19901 (8 The Green, Suite #10212, Dover, Delaware 19901, USA) (买方)。

## AGREED TERMS

### 约定条款

#### 1. INTERPRETATION 解释

The definitions and rules of interpretation in this clause apply in this agreement.

本条款中的定义和解释规则适用于本协议。

**Company:** Shanghai Engin Digital Technology Co. Ltd, a company incorporated and registered in China with Uniform Social Credit Code 91310112051224370P whose registered office is at Room A2004, Building B, No. 555, Dongchuan Road, Minhang District, Shanghai, China, further details of which are set out in Schedule 1.

公司：上海鹰吉数字技术有限公司，一家在中国注册并成立的公司。其统一社会信用代码为91310112051224370P，住所地位于中国上海市闵行区东川路555号乙楼A2004室。详情见附表1。

**Consideration Shares:** new shares in the capital stock of the Buyer equal to 75,000 shares to Mr Liu and 50,000 shares to Ms Liang.

代价股份：买方股本中相等于75,000股股份予刘先生及50,000股股份予梁女士的新股份。

**Deferred Payment:** the deferred payment of RMB2,000,000 for the Sale Shares to be paid by the Buyer to the Sellers in accordance with Clause 3 and divided as to RMB1,200,00 to Mr Liu and RMB800,000 to Ms Liang.

递延付款：买方将根据本协议第3条向卖方支付出售股份的递延付款人民币2,000,000元，并分成人民币1,200,000元给刘先生及人民币800,000元给梁女士。

**Performance Tests:** the performance tests for the Reference Plant that are due to take place in April 2020 and May 2020 to confirm that the Reference Plant meets the criteria prescribed by the PRC governmental standard attached to the Shouhang Agreement. Should the Company in conjunction with Shouhang not be in a position to perform the tests then an independent and international third party shall be appointed to perform the tests to the same standard at the cost of Shouhang.

性能测试：将于2020年4月和2020年5月进行的公司参照工厂的性能测试。如果公司和电厂家主首航无法执行测试，则应指定独立的第三方来按照相同的中国政府标准《太阳能热发电机组投产运行验收技术条件》执行测试，但费用由电厂家主首航承担。

**PRC:** The People's Republic of China.

**PRC:**中华人民共和国。

**Reference Plant:** Dunhuang 100MW Molten Salt Tower Power Plant.

**参照电厂:**敦煌100兆瓦熔盐塔式光热发电厂。

**RMB:** The lawful currency of the PRC.

**人民币:**中国的法定货币。

**Sale Shares:** a 25% share of the registered capital of the Company, all of which is owned by the Sellers in the proportions disclosed to the Buyer.

**出售股权:** 公司注册资本的25%，卖方按照比例向买方披露的所持股份。

**Shouhang Agreement:** the agreement for the sale and purchase of the remaining 75% of the shares in the Company by the Buyer with Beijing Shouhang IHW Resources Saving Technology Company Ltd.

**首航协议:** 买方与北京首航艾启威节能技术股份有限公司关于买卖本公司剩余75%股权的协议。

## 1. **CONDITIONS**条件

1.1 Closing is subject to and conditional upon the condition in Clause 1.3 being satisfied (or waived by the Buyer in its discretion) by 31 July 2020.

交割应以本协议第1.3条中的条件在2020年7月31日前得到满足（或买方酌情放弃）为条件。

1.2 If a Condition under Clause 1.3(a) or 1.3(b) is not fully satisfied, then unless each unfulfilled Condition is waived by the Buyer, this agreement shall terminate and cease to have effect.

如果条款1.3(a)或1.3(b)项下的条件未完全满足，则除非买方放弃每一项未满足的条件，否则本协议应终止并不再有效。

1.3 The following are the conditions (**Conditions**):

以下为具体条件 (条件) :

- (a) The execution and full performance of the Shouhang Agreement and this Agreement in respect of the Consideration Shares.  
全面履行及签署本代价股份协议和首航协议。
- (b) The satisfactory completion of the Performance Tests in respect of the Deferred Payment. 满意地完成有关延期付款的性能测试。

2. **SALE AND PURCHASE 买卖**

2.1 On the terms of this agreement, the Sellers shall sell and the Buyer shall buy the Sale Shares with full title guarantee free from all encumbrances and together with all rights that attach (or may in the future attach) to the Sale Shares including, in particular, the right to receive all dividends and distributions declared, made or paid on or after the date of this agreement.

根据本协议的条款，卖方应出售，买方应购买具有完全所有权担保的出售股份，该出售股份不受任何产权负担的约束，并连同附加（或将来可能附加）于出售股份的所有权利，尤其包括收取在本协议日期或之后宣布，作出或支付的所有股利和分配的权利。

2.2 Each Seller covenants with the Buyer that (a) it has the right to sell the Sale Shares on the terms set out in this agreement, (b) it shall do all it can, at its own cost, to give the Buyer the full legal and beneficial title to the Sale Shares and (c) it sells the Sale Shares free from all Encumbrances.

各卖方向买方承诺:(a)其有权根据本协议规定的出售条款以出售股份；(b)应尽其所能，自费给予买方对出售股份的全部法律和实益所有权；(c)其出售的出售股份不附带任何产权负担。

2.3 The Consideration Shares shall be issued to the Sellers on the satisfactory execution of the Shouhang Agreement and this Agreement.

代价股份将于首航协议及本协议圆满执行后向卖方发行。

2.4 The Deferred Payment shall be paid by the Buyer to the Sellers in cash on satisfaction of Clause 1.3 (b). All payments to be made to the Sellers under the Deferred Payment clause of this agreement shall be made in RMB by electronic transfer of immediately available funds to each Seller and to such account as it may direct

延期付款应由买方在满足第1.3(b)款的要求后以现金支付给卖方。根据本协议延期付款条款向卖方支付的所有款项均应以人民币支付，并通过电子方式将立即可用的资金转帐给每一卖方及其指定的账户。

2.5 Closing shall take place at such place or time as agreed in writing by the Sellers and the Buyer.

成交应在买卖双方书面约定的地点或时间进行。

2.6 At closing and in exchange for the Consideration Shares, each Seller shall transfer the Sale Shares in such form as is necessary for the Buyer to acquire legal ownership of the Sale Shares in accordance with the laws of the PRC.

在交割时，作为代价股份的交流，每一卖方应按照买方根据中国法律取得出售股份的合法所有权所必需的形式转让出售股份。

3. **GENERAL CLAUSE 一般条款**

3.1 A notice given to a party under or in connection with this agreement shall be in writing and in English, shall be signed by the party giving it to the other party to such fax or email address as that party has given the other for the purposes of this agreement.

在本协议项下或与本协议有关的情况下，向一方发出的通知应以书面形式和英文写成，并应由另一方签署，传真或电子邮件地址与该方为本协议的目的而向另一方发出的地址相同。

3.2 This Agreement is made in both English version and Chinese version. Where there is discrepancy between the two languages, the English should prevail.

本协议以英文和中文书就。如果英文和中文不一致的，以英文为准。

3.3 This agreement and any dispute or claim (including non-contractual disputes or claims) arising out of or in connection with it or its subject matter or formation shall be governed by and construed in accordance with the law of Hong Kong.

本协议及任何因本协议或其标的物或形成而产生或与本协议或其标的物或形成有关的争议或索赔（包括非合同争议或索赔），应适用香港法律并按其解释。

3.4 Each party irrevocably agrees that the courts of Hong Kong shall have non-exclusive jurisdiction to settle any dispute or claim (including non-contractual disputes or claims) arising out of or in connection with this agreement or its subject matter or formation.

各方不可撤销地同意香港法院拥有非专属司法管辖权，以解决因本协议或其标的物或形成而产生或与之相关的任何争议或索赔（包括非合同争议或索赔）。

<SIGNATURE PAGE TO FOLLOW>

This agreement has been entered into on the date stated at the beginning of it.

本协议于文首日期订立。

Signed by **Liu Tao**  
签字人 **刘涛**

Signed by **Liang Qi**.  
签字人 **梁旗**

Signed by  
签字人

for and on behalf of

**Pacific Green Technologies Inc.**

为及代表太平洋绿色技术股份有限公司

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Director

董事





**Pacific Green Further Expands Its Environmental Technologies Portfolio By Acquisition  
Into Concentrated Solar Power, Desalination and Waste to Energy**

**DOVER, DE** / December 23, 2019 / Pacific Green Technologies Inc. (PGTK or the “Company”) (OTCQB: PGTK), owner of the industry leading ENVI-Marine™ and ENVI-Clean™ Exhaust Gas Scrubbing Systems, today announced the acquisition of 100% of Shanghai Engin Digital Technology Co. Ltd, a company incorporated and registered in China (“ENGIN”).

ENGIN is a development, design and engineering company focused primarily on Concentrated Solar Power (“CSP”), Salt Water Desalination and Waste to Energy technologies. ENGIN has developed, designed and engineered three utility scale CSP operating reference plants in China and has a Desalination reference plant in Indonesia:

- Dunhuang 100MW Molten Salt Tower CSP Plant;
- CGN Delingha 50MW Parabolic Trough CSP Plant; and
- Dunhuang 10MW Molten Salt Tower CSP Plant.

In 2008 CSP accounted for just 0.5GW of world electricity generation rising to 5.5GW in 2018.

**Transactions**

The Company has acquired ENGIN through two separate transactions (the “Transactions”). The Transactions will be funded by the Company’s own internal financial resources. Over the next six months, ENGIN’s staff will be integrated into the Company’s existing nearby offices in Shanghai.

Pacific Green Technologies Inc. (“PGTK”) has acquired 75% of the registered share capital of ENGIN, a company incorporated and registered in China (“ENGIN”), for maximum consideration of RMB 76,000,000. The vendor of the 75% interest is Beijing Shouhang IHW Resources Saving Technology Company Ltd. (“Shouhang”), a company listed on the Shenzhen Stock Exchange in China.

PGTK and Shouhang agreed and signed the transaction on December 20, 2019 (the “Shouhang Agreement”). Consideration is payable as follows:

- RMB 41,000,000 payable on signing;
  - RMB 15,000,000 payable on or before 20 March 2020;
  - RMB 20,000,000 payable on successful completion of certain Performance Tests.
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Contemporaneously, PGTK has acquired 25% of the registered share capital of ENGIN from Mr Liu Tao and Ms Liang Qi (the “Vendors”) in a separate transaction for maximum consideration of RMB 2,000,000 and the issue of 125,000 new shares in the capital stock of PGTK. PGTK and the Vendors agreed and signed this transaction on December 20, 2019. Consideration is payable as follows:

- the issue of 125,000 new shares in the capital stock of PGTK to the Vendors;
- RMB 2,000,000 payable on successful completion of certain Performance Tests.

#### **International Strategic Alliance Agreement**

As part of the Shouhang Agreement, the parties have agreed an intent to enter an International Strategic Alliance Agreement between PGTK, Shouhang and PowerChina for the development of CSP plants whereby PGTK and ENGIN provide the Intellectual Property, the technical know-how, design and engineering, Shouhang provides manufacturing of the solar field and molten salt tank services and PowerChina provides the EPC role both in China and international markets.

Scott Poulter, Pacific Green Technologies’ CEO said, “We are very pleased to have acquired ENGIN and to incorporate new advanced technologies, intellectual property and engineering know-how into our successful business model. ENGIN has been at the core of developing CSP technologies in China and will be at the core of this exciting new part of our business. We also look forward to building a strong relationship with Shouhang as both a strategic partner and client.

We have achieved great success in the growth of our Marine Division and alongside that growth we intend to expand our land-based initiatives. Our strategic goal is to become the number one company in environmental technologies.”

#### **About Pacific Green Technologies, Inc.**

In support of the world’s need for cleaner and more sustainable energy, Pacific Green Technologies has developed a portfolio of patented, emission control technologies that remove pollutants from marine engine, power plant and waste incinerator exhaust streams to meet increasingly stringent environmental standards. Pacific Green solutions utilize its patented “Turbo Head Technology™” which enables a more thorough mixing of exhaust gases and a chosen reagent solution that delivers more effective contaminant removal in a system that is both smaller and more efficient to build and operate.

Pacific Green formed a strategic joint venture with PowerChina SPEM, a unit of China's largest engineering, procurement, and construction firm, to support the manufacture, design, and installation of its solutions on a global scale, while also serving as an in-country sales agent for commercial opportunities in mainland China.

For more information: [www.pacificgreentechnologies.com](http://www.pacificgreentechnologies.com)

**About Shouhang** (<https://www.sh-ihw.es/about-us>)

Beijing Shouhang IHW Resources Saving Technology Company Ltd was established in 2001 with headquarters in Beijing. It has branch companies in Europe (Spain), Hong Kong, Shanghai, Tianjin, Xinjiang, Gansu and Xiamen and count with a workforce of more than 1,500 employees. Shouhang is a listed company of A-share in Shenzhen Stock Exchanges Center (Stock Code: 002665). The Company's core competencies include R&D, engineering, manufacturing, EPC and project investment for several high-tech industries, such as concentrated solar power (CSP), power plants, air cooling systems, waste heat power generation, desalination systems and industrial waste water zero emission systems.

**About PowerChina** (<http://en.powerchina.cn/>)

Approved by the State Council, Power Construction Corporation of China (POWERCHINA) is a wholly State-owned company founded on Sept 29, 2011 on the basis of 14 provincial, municipal, and district electric power survey and design, engineering, and equipment manufacturing enterprises formerly affiliated to Sinohydro Group Ltd, HydroChina Corporation, State Grid Corporation of China, and China Southern Power Grid Co Ltd.

POWERCHINA is a large comprehensive construction group that offers solutions to the entire chain of the global energy and power, water resource and environment, infrastructure, and real estate industries. Its main businesses cover energy and power, water conservancy, railways and subways, roads, airports, buildings, water environmental governance, city infrastructure, large civic engineering and construction, as well as investment, planning, and design, project contracting, equipment manufacturing, and operation of projects. It highlights a core competence in hydro power projects and industry chain integration. Authorized by relevant national ministries and commissions, POWERCHINA also works in the national planning and review of hydropower, wind power, solar power, and other clean energy and new energy sources.

**Notice Regarding Forward-Looking Statements:**

This news release contains "forward-looking statements," as that term is defined in Section 27A of the United States Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Statements in this news release which are not purely historical are forward-looking statements and include any statements regarding beliefs, plans, expectations or intentions regarding the future. Such forward-looking statements include, among other things, that Pacific Green's emission control system has significant potential to be a market leader in China.

Actual results could differ from those projected in any forward-looking statements due to numerous factors. Such factors include, among others, general economic conditions, and the continuation of the JV with POWERCHINA SPEM resulting in definitive agreements. These forward-looking statements are made as of the date of this news release, and we assume no obligation to update the forward-looking statements, or to update the reasons why actual results could differ from those projected in the forward-looking statements. Although we believe that the beliefs, plans, expectations and intentions contained in this news release are reasonable, there can be no assurance that such beliefs, plans, expectations or intentions will prove to be accurate. Investors should consult all the information set forth herein and should also refer to the risk factors disclosure outlined in our annual report on Form 10-K for the most recent fiscal year, our quarterly reports on Form 10-Q and other periodic reports filed from time-to-time with the Securities and Exchange Commission.

**Contact:**

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