

POWER SOURCE FRAMEWORK AGREEMENT

BETWEEN

GOVERNMENT OF MONGOLIA

AND

OYU TOLGOI LLC

2018

Power Source Framework Agreement

1 Parties

- (a) The Government of Mongolia represented jointly by the Minister for Energy, Davaasuren Tserenpil and by Tleikhan Almalik, the Head of the Energy Regulatory Commission (**Government**); and
- (b) Oyu Tolgoi LLC, a company incorporated in Mongolia, of 12th Floor, Monnis Tower, Chinggis Avenue, 15, Sukhbaatar District, Ulaanbaatar 14240, Mongolia represented jointly by Batsukh Galsan, Chairman of the Board of Directors and Armando Torres, Chief Executive Officer (**OT LLC**).

2 Recitals

The Government and OT LLC wish to enter this agreement in order to develop a TT Power Plant (as defined below) and to specify the other possible domestic sources to supply power to Oyu Tolgoi mine (**OT Project**), including but not limited to the Mongolian national grid and renewables projects in order to implement clause 7.3 of the Investment Agreement dated 6 October 2009 between the Government, OT LLC (formerly Ivanhoe Mines Mongolia Inc LLC), Turquoise Hill Resources Limited (formerly Ivanhoe Mines Ltd) and Rio Tinto International Holdings Limited (**OT Investment Agreement**).

3 Fundamental Principles

The parties acknowledge and agree that:

- (a) the secure, safe and stable supply of domestic power to the OT Project, in an economically viable and competitive manner for OT LLC, is of critical and material importance to OT LLC, its shareholders, and the Government, and to economic development in the interest of the people of Mongolia including in the Southern region of Mongolia; and
- (b) for the purposes of clause 3(a), the power supply to the OT Project may involve a combination of one or more potential primary, supplementary and back-up sources.

4 Power source of OT mine

4.1 TT Power Plant

- (a) Pursuant to Parliament Resolution No. 73 of 2018 and the Government decision for a power station to be developed at the Tavan Tolgoi coal fields, OT LLC therefore agrees to suspend the commencement of construction of the OT Power Plant subject to clause 7.4.
- (b) The Government and OT LLC acknowledge that they will prioritise the development of the TT Power Plant project as described below (**TT Power Plant**), subject to the terms of this agreement and further technical, commercial, legal and financial due diligence and investigations:
 - (i) *location*: land will be identified at Tavan Tolgoi coal fields. This may potentially include land identified by Tavantolgoi Tsakhilgaan Stants LLC (**TTPP LLC**);
 - (ii) *ownership*: the Government supports that the TT Power Plant should be majority owned or controlled by OT LLC and, for this purpose, OT LLC would take ownership in and control of TTPP LLC, subject to negotiation between various investors;
 - (iii) *funding*: the TT Power Plant's funding sources may include, but not be limited to, external third party debt;

- (iv) *technology and configuration*: 300MW (with no single unit having a capacity greater than 150MW) gross capacity coal fired power plant with a dedicated electricity line (defined in accordance with clause 2.6 of the TTPP IA) and water supply infrastructure, in conjunction with such other power sources as are described elsewhere in this agreement (including imported or other back-up power, power from the Mongolian national grid, renewables power and diesel power);
 - (v) *grid connectivity*: the TT Power Plant will be connected directly to the OT Project's central substation via a dedicated double circuit 220kV electricity line (defined in accordance with clause 2.6 of the TTPP IA) to ensure security and stability of power supply to the OT Project;
 - (vi) *coal supply*: Erdenes Tavan Tolgoi JSC and Energy Resources LLC, potentially with other domestic suppliers, are intended to be the primary coal suppliers with long-term and stable supply contracts;
 - (vii) *water supply*: the TT Power Plant intends to draw water from the western side of the Naimdain Khundii Water Basin as envisaged in the existing water supply arrangements for the TT Power Plant, and construct its own water infrastructure, subject to further technical, commercial and legal due diligence and finalisation of contractual and permitting arrangements;
 - (viii) *regulatory regime and investment framework*: prioritized and unregulated supply regime to OT LLC (subject to Energy Regulatory Commission granting a special permit for "Unregulated supply of energy", which the Government must promptly grant) and the Tavan Tolgoi Power Plant-related Investment Agreement dated 24 June 2016 with the Government (**TTPP IA**)); and
 - (ix) *operation and maintenance*: OT LLC (or TTPP LLC) may facilitate, partner with or contract suitably qualified companies to provide operation and maintenance services to the TT Power Plant.
- (c) The Government and OT LLC shall forthwith on and after the date of this agreement discuss how to best coordinate their respective activities and due diligence investigations in relation to the prioritisation of the TT Power Plant.

4.2 Role of OT LLC

OT LLC will dedicate the relevant management personnel and other resources towards the prioritisation of the development of the TT Power Plant and shall use its commercially reasonable efforts to:

- (a) complete negotiations with the relevant stakeholders as soon as reasonably practical and to finalise the relevant agreements. These agreements (**Project Documents**) include:
 - (i) share transfer agreement for TTPP LLC among the shareholders, if required;
 - (ii) any required agreements to obtain the licences or rights of use for the development of TT Power Plant;
 - (iii) shareholders agreement;
 - (iv) power purchase agreement;
 - (v) back-up arrangements;
 - (vi) finance agreements (including ESIA approvals);
 - (vii) coal supply agreement;
 - (viii) construction contracts (including EPC and EPCM);
 - (ix) operation and maintenance agreement; and

- (x) any other relevant agreements;
- (b) complete all relevant studies, designs, and procurements in preparation towards power plant construction activities; and
- (c) seek to ensure that OT LLC's funding arrangements through international financial organisations are secured and available for the purposes of the TT Power Plant.

4.3 Role of the Government

The Government:

- (a) agrees to provide full support to OT LLC in relation to all activities contemplated or described in this agreement including as further described in clause 7.2;
- (b) shall provide support to OT LLC in relation to any commercial negotiations with any stakeholders (including in respect of the Project Documents) which shall be led by OT LLC;
- (c) acknowledges that the TTPP IA is valid and on foot and agrees to:
 - (i) if requested by OT LLC, provide that the shares in TTPP LLC (or any of its subsidiaries) are transferred to OT LLC (or any subsidiary of OT LLC nominated by OT LLC), and make any necessary and reasonable amendments to the TTPP IA as required by OT LLC; or
 - (ii) if OT LLC cannot retain at least 51% ownership of TTPP LLC, enter into a new investment agreement with OT LLC (or any subsidiary of OT LLC nominated by OT LLC) on the same or substantially the same terms as the TTPP IA, other than as required to be different as a result of Investment law amendment of 10 November 2016 and with any necessary and reasonable amendments required by OT LLC in accordance with clause 4.3(c)(i);
- (d) without limiting its other obligations under this agreement, and in compliance with the relevant laws and regulations of Mongolia, shall procure that the Energy Regulatory Commission extends the special permits provided for "Construction of energy facility", "Electricity production, distribution and regulated supply", "Heat production, distribution and regulated supply", and "Unregulated supply of electricity"; and
- (e) shall ensure that the licences, permits and approvals held by TTPP LLC or any of its subsidiaries from time to time shall be extended or granted with necessary amendments in a timely manner and/or that OT LLC or its subsidiaries shall be granted any licences, permits and approvals for the TT Power Plant in a timely manner as applicable.

4.4 TT Power Plant milestones and timetable

- (a) Each party shall use its commercially reasonable endeavours to achieve the milestones for which it is the party responsible by the completion dates set out in the following table. The completion dates are subject to extension in accordance with clause 4.4(b).

TT Power Plant Milestone	Completion date	Party responsible
Investors to agree on transfer of the ownership for TTPP LLC (permits, documents etc.)	31 January 2019	Government OT LLC
Amendment to transfer TTPP IA	31 January 2019	Government OT LLC
Issue or extension of permits, licences and regulatory approvals	31 January 2019	Government

Agree funding principles	1 March 2019	Government OT LLC
Project Documents signing (the documents referenced in clause 4.2(a))	1 October 2019	Miscellaneous stakeholders of TT Power Plant
TT Power Plant construction commencement	31 March 2020	OT LLC
TT Power Plant construction completion	30 June 2023	OT LLC

- (b) Where a milestone is delayed as a result of a Delay Event, the completion date for that milestone will be extended for the duration of such Delay Event (and each subsequent completion date will also be extended accordingly).
- (c) **Delay Event** means:
- (i) any event of Force Majeure as that term is defined in the TTPP IA;
 - (ii) in the case of OT LLC, any lack of or inability to raise funding, or any failure by Government to achieve the milestones for which it is responsible or to comply with its obligations under this agreement; and
 - (iii) events of the nature described in clause 4.4(d).
- (d) The parties acknowledge and agree that:
- (i) achievement of the milestones, including the commencement and completion of construction of the TT Power Plant, will require the mutual cooperation of the parties and third parties including entry into agreements with third parties; and
 - (ii) failure of such cooperation to occur or failure to enter such agreements, and the failure to reach a particular milestone, may impact on a party's ability to meet other milestones.

5 Mongolian national grid

- (a) Consistent with the options contemplated by the OT Investment Agreement, OT LLC and the Government acknowledge that a source of power supply to the OT Project is power sourced from the Mongolian national electricity grid. Any power in excess of the OT Project's requirement may be supplied from the TT Power Plant to the Mongolian national grid based on the tariff approved by the Energy Regulatory Commission.
- (b) In relation to the supply of power to the OT Project from the Mongolian national grid, it is agreed that the representatives of the Ministry of Energy, the Relevant Entity and OT LLC shall use their best efforts to collaborate in order to jointly identify potential solution(s) for reliable operation, without any negative impact to either the Mongolian national grid or OT Project (including having regard to the principles in clause 3 and clause 5(c)).
- (c) The parties acknowledge and agree that before the Mongolian national grid is a viable source of supply to the OT Project, having regard to the principles in clause 3, it shall be determined by the joint and unanimous agreement of the Government and OT LLC whether the Mongolian national grid is able to provide power (in respect of the amount of power which can be provided by the Mongolian national grid at that time) to the OT Project in a manner that is reliable, stable, secure and otherwise technically feasible and at economically feasible and competitive cost compared to OT LLC's other options, in which case the tariff approved by the Energy Regulatory Committee which is applicable for its mining customers will apply to OT LLC on non-discriminatory basis.
- (d) If the Government and OT LLC jointly and unanimously agree that the Mongolian national electricity grid is a viable source of supply to the OT Project in accordance with clause

5(c), then the parties may enter into power purchase agreement(s) for the supply of power to selected parts of the OT Project from the Mongolian national electricity grid in accordance with the following:

- (i) such supply may be for any period from 2019 (including as supplemental or back-up power following supply of power from the TT Power Plant or contingency arrangements contemplated by this agreement); and
 - (ii) OT LLC agrees that it will use its commercially reasonable efforts to take as much power from the Mongolian national electricity grid, subject to clause 5(c) and the supply of power to the OT Project already available or that will become available from the TT Power Plant and other contingency arrangements contemplated by this agreement.
- (e) The Government agrees that:
- (i) OT LLC has the right to purchase imported power from the Relevant Entity (via arrangements with Inner Mongolia Power Corporation and its related entities (**IMPC**)) before the expiry of the final completion date in clause 4.4(a); and
 - (ii) OT LLC has the right to continue to purchase power from the Relevant Entity (such power sources may include both the Mongolian national grid and/or imported power from IMPC) after the expiry of the final completion date in clause 4.4(a) as back-up power or as main source of power as stipulated in clause 7.4, subject to the principles and requirements in clause 3, and the Relevant Entity must procure such power supply, if required.
- (f) **Relevant Entity** means the entity that holds the power supply special permit.

6 Other sources of power

6.1 Diesel back-up

- (a) For the purposes of secure, safe and stable supply of domestic power to the OT Project, including recognising that the sources of supply described in this agreement may from time to time suffer events of force majeure or other interruptions, OT LLC shall be obliged to construct and operate back-up diesel fired power facilities at the OT Project site, for supply to the OT Project, as required to protect against injury to property or persons and for emergencies
- (b) Other than as stated in clause 6.1(a), OT LLC has the right (but not the obligation) to construct and operate such further back-up diesel fired power facilities at the OT Project site for supply to the OT Project as OT LLC considers necessary or desirable for the purposes of the OT Project operations.

6.2 Renewables

The parties recognise the role of supplemental power being supplied to the OT Project by a renewables project (such as solar or wind) including with a consortium consisting of domestic investors and international developers with significant independent power producer (**IPP**) experience.

7 Other

7.1 Government obligations

- (a) (**General**) The Government shall fully support all activities contemplated by this agreement, including:
 - (i) through the relevant State central administrative authorities and other administrative authorities;

- (ii) by its dedication of sufficient resources including, but not limited to, as contemplated under clause 7.2;
 - (iii) by ensuring the timely grant, receipt or supply of any and all required permits, approvals and licences, and land and water rights, or other permits, approvals, licences of any kind, as may be required under this agreement.
- (b) This includes support, without limitation, and in compliance with the relevant laws and regulations of Mongolia, in order for OT LLC to achieve the supply of power to the OT Project from any source contemplated or referred to in this agreement.
- (c) In respect of any obligations of Government under this agreement to provide any assistance, support or approval, the Government shall procure that all levels of government including all ministries, agencies and governmental bodies of any kind must all provide any assistance, support or approval as relevant.
- (d) **(Financing)** Without limiting the other provisions of this agreement:
 - (i) the Government shall support OT LLC arranging and procuring required funding for the power supply and power supply infrastructure for the OT Project;
 - (ii) once this agreement is executed, the Government and OT LLC shall discuss and agree on the key funding principles for the power supply and power supply infrastructure for the OT Project; and
 - (iii) the parties agree to constructively work together with the intention that the return to all the shareholders of OT LLC is not unduly negatively impacted by the implementation of this agreement.

7.2 Implementation arrangements

The Government:

- (a) shall establish and maintain a steering committee comprising representatives of the Ministry of Energy, the Ministry of Finance, the Ministry of Mines and Heavy Industry and the Cabinet Secretary of Government, to be referred to as the Project Steering Committee to be responsible for providing overall guidance and facilitating coordination among the different ministries, agencies and governmental bodies of any kind in relation to the implementation of the activities under this agreement; and
- (b) may establish and maintain a Project Implementation Unit, under the Ministry of Energy which Project Implementation Unit shall be responsible for day-to-day support in facilitating the implementation of the activities under this agreement.

7.3 Power supply unregulated / connection points

- (a) The Government agrees that power supply from the TT Power Plant, imported power and through direct connection from any renewables IPP to the OT Project shall be unregulated and the electricity tariffs and pricing shall accordingly be agreed by mutual private contract between the relevant parties on commercial and non-discriminatory terms.
- (b) The Government acknowledges that any lines for the supply of power from a power plant, the Mongolian national grid, any imported power, and any renewables power, will be connected directly to the OT Project substation, for security and stability of power supply to the OT Project. The OT Project substation and, if agreed by OT LLC in its sole discretion, any renewables project, may potentially have its own separate connection to the Mongolian national grid.

7.4 Contingency arrangements

- (a) If:
- (i) construction of the TT Power Plant under clause 4 has not commenced by the completion date for TT Power Plant construction commencement in clause 4.4(a) (subject to clause 4.4(b)); or
 - (ii) either party gives notice after 1 October 2019,
- then the parties shall forthwith seek to, in good faith, agree an alternative basis on which the TT Power Plant may proceed.
- (b) If the parties do not so agree an alternative basis for the progress of the TT Power Plant within two (2) months after either clause 7.4(a)(i) or 7.4(a)(ii) applies, the Government and OT LLC must mutually agree on whether OT LLC will:
- (i) proceed to develop the OT Power Plant; or
 - (ii) enter into arrangements for the supply of power to the OT Project from the Mongolian national grid from 2023; or
 - (iii) proceed to develop a primary renewables power source as contemplated by clause 7.4(d),
- or any combination of the options listed above, provided that if such mutual agreement is not reached within 2 (two) months (or such other longer period as the parties may agree in writing) after the end of the first-mentioned 2 (two) month period, then OT LLC may and has the right to implement any one or any combination of the options listed above, and OT LLC will complete the construction of the OT Power Plant and/or the combination of options listed above within 2023 subject to extension due to any Delay Event (**deadline**). While the parties continue, or are required to continue, discussions and/or seek agreement under clauses 7.4(a) and / or 7.4(b) and until the necessary agreements are reached (**discussion period**), then the end of the deadline for the domestic sourcing of power under this clause 7.4(b) will be extended by the duration of such discussion period and (without limiting clause 7.4(c)) OT has the right to continue to purchase imported power from the Relevant Entity.
- (c) If this clause 7.4 applies, the Government shall provide support to OT LLC (consistent with its obligations under clause 7.7 of the OT Investment Agreement) so that OT LLC may progress the activities and power solutions contemplated by this clause 7.4. Without limiting any other provision of this agreement, this support from the Government shall include all assistance from the Government under the OT Investment Agreement and includes:
- (i) the issue, extension or renewal of any necessary or desirable licences, permits and approvals in a timely manner; and
 - (ii) support to OT LLC to secure any interim power requirement with imported power, pending the start of the supply of power as contemplated by this clause 7.4 and then support to obtain power from the Relevant Entity as envisaged in clause 5(e) as a back-up power source.
- (d) (**renewables**) The parties recognise that:
- (i) emerging technologies are leading to continual improvements to the ability of a renewables project to supply power;
 - (ii) if a renewables project can deliver a technical solution which does not negatively impact stability of either the OT Project or the Mongolian energy system, then it may be a source of power to the OT Project (and for this purpose any renewables project may be connected directly to the OT Project); and

- (iii) accordingly, the parties agree that, notwithstanding anything else in this agreement, a renewables project as a source of power to the OT Project (including together with one or more other sources of power including back-up power) may be investigated at the same time as other activities under this agreement occur.
- (e) **(OT Power Plant)** OT LLC retains the right to obtain and/or maintain, renew or extend (as applicable) any related permits, approvals and licences for the purposes of the OT Power Plant and the Government must fully support, in compliance with the relevant laws and regulations of Mongolia, OT LLC in this regard.

8 Warranties

- (a) Each party to this agreement represents and warrants that its promises, acknowledgements and agreements under this agreement are lawful, and that it is duly authorised and empowered to execute this agreement.
- (b) The Government represents and warrants that:
 - (i) it has been authorised by the Cabinet of the Government of Mongolia on 26 December 2018 to execute this agreement for and on behalf of the Government of Mongolia as recorded in the Cabinet meeting minutes.
 - (ii) the signatories to this agreement are duly authorised to represent the Government of Mongolia and execute this agreement for and on behalf of the Government of Mongolia by Prime Ministerial decree no. 211 of 26 December 2018.
 - (iii) this agreement is lawful and binding on it and any successor governments (including all levels of government ministries, agencies and governmental bodies of any kind) and that it shall procure that all ministries, agencies and governmental bodies of any kind comply with the terms of this agreement and give it full effect;
- (c) OT LLC represents and warrants that it has been duly authorised by the Board of Directors to execute this agreement for and on behalf of OT LLC.

9 Dispute resolution

- (a) Any disputes between the parties arising out of or in connection with this agreement shall be settled by the parties first attempting in good faith to negotiate a resolution and if a negotiated resolution to the dispute is not agreed to within 60 (sixty) Working Days (as that term is defined in the TTPP IA) of the date of a party's request in writing for such negotiation, or such other time period as may be agreed, then the dispute shall be settled in accordance with clause 9(b).
- (b) If a dispute is not settled by negotiation in accordance with clause 9(a), it shall be resolved by binding arbitration in accordance with the procedures under the Arbitration Rules of the United Nations Commission on International Trade Law (the **UNCITRAL Rules**) as in force at the time of the dispute. Accordingly, the following shall apply:
 - (i) the number of arbitrators shall be 3 (three);
 - (ii) the 3 (three) arbitrators shall be appointed in accordance with rules 7 and 8 of the UNCITRAL Rules;
 - (iii) the language of the arbitration shall be English;
 - (iv) the arbitrators shall apply the laws and regulations of Mongolia to the interpretation of this agreement;
 - (v) the place of arbitration shall be in Singapore; and

- (vi) the arbitral proceedings shall be administered under UNCITRAL Rules by the Singapore International Arbitration Centre.
- (c) The arbitral award shall be final and binding on the parties. Judgment on the award may be entered by any court having competent jurisdiction, provided that an arbitral award shall first be presented in a relevant court of Mongolia for execution and enforcement. If such execution and enforcement has not occurred within 30 (thirty) days of presentation, the award may be presented in any other court having competent jurisdiction. The parties hereby commit to fulfil the execution and enforcement of the arbitral award and shall not raise any defence to its execution and enforcement.
- (d) The provisions of this clause 9 shall continue to apply to any dispute that arises during the term of this agreement or any dispute that occurs after the expiry or earlier termination of this agreement in regard to activities arising out of or in connection with this agreement.
- (e) If a party has triggered the dispute resolution mechanism under a related agreement (including the OT Investment Agreement) and there is a dispute under this agreement based on the same event or series of events, the parties will act in good faith to discuss whether to consolidate the hearing of such dispute under the dispute resolution mechanism in the OT Investment Agreement.

10 Governing law and other matters

- (a) The parties agree that during implementation of this agreement, OT LLC will be in compliance with clause 7.3 of the OT Investment Agreement. On sourcing its total power requirements as contemplated by this agreement, OT LLC will have satisfied its obligations under clause 7.3 of the OT Investment Agreement.
- (b) This agreement is entered in accordance with the laws of Mongolia and shall be governed by and interpreted in accordance with the laws and regulations of Mongolia and international treaties to which Mongolia is a party.
- (c) A party shall not assign any of its rights and obligations under this, other than that OT LLC may assign its rights under this agreement as required by the financiers in connection with any financing of the OT Project and/or the TT Power Plant, and OT LLC shall give prior notice of such assignment to the Government.
- (d) If any provision of this agreement is found to be unenforceable for whatever reason, that provision will be severed from the agreement, and the remainder of this agreement shall remain in force.
- (e) Upon mutual consent recorded in writing, the parties may amend or modify this agreement.
- (f) This agreement will be provided and executed in the Mongolian and English languages, with each party retaining one copy in each language and the parties agree that the Mongolian and English versions will be treated equally except that, in the event of any legal dispute in the interpretation between the two-language versions, the English version shall prevail.
- (g) This agreement shall be effective from the date when all parties duly sign this agreement and shall have the duration of the agreement implementation, provided that clauses 5(e), 7.4, 8, 9 and 10 survive thereafter.

This agreement is executed on 31 December 2018

For and on behalf of the GOVERNMENT OF MONGOLIA, by its duly authorised representatives:

Davaasuren Tserenpil
Minister for Energy

Signature:

Date:

Tleikhan Almalik
Head of the Energy Regulatory Commission

Signature:

Date:

For and on behalf of Oyu Tolgoi LLC, by its duly authorised representatives:

Batsukh Galsan
Chairman of the Board of Directors

Signature:

Date

Armando Torres
Chief Executive Officer

Signature:

Date: