magma

ENERGY SWEDEN A.B.

US$35,689,255.00 SECURED BOND

DUE: October 23, 2021

WHEREAS:

A. ROSS J. BEATY (the "**Lender**"), a businessperson with an address for notice purposes at 1550 - 625 Howe Street Vancouver, British Columbia, V6C 2T6, has agreed to provide a loan (the "**Loan**") to MAGMA ENERGY SWEDEN A.B., a private stock company existing under the laws of Sweden, having its principal place of business at Kungsgatan 42, PO Box 2259 SE-403 14 Götenborg, Sweden ("**Magma Sweden**"), pursuant to the terms and conditions set out in this Secured Bond.

B. The proceeds of the Loan shall be used by Magma Sweden to repay 50% of the principal amount outstanding pursuant to an existing secured bond issued by Magma Sweden on December 11, 2009 in favour of Orkuveita Reykjavíkur ("**OR**"), as amended by a first amendment agreement dated February 3, 2015, and as further amended by a second amendment agreement dated September 29, 2016 (as amended, the "**OR Bond**"), such OR Bond having a present fair market value of approximately US $72,000,000.

C. The OR Bond was issued by Magma Sweden as partial consideration for the purchase by Magma Sweden from OR of approximately 31.23% of the issued and outstanding shares in the capital of HS Orka hf, an Icelandic limited liability company deriving its income from various geothermal electric facilities wholly-owned and located in Iceland, pursuant to the terms and conditions more particularly set out in the Share Sale and Purchase Agreement dated August 31, 2009.

NOW THEREFORE FOR VALUE RECEIVED, Magma Sweden hereby acknowledges itself indebted and promises to pay to the Lender and his successors and permitted assigns or to the holder of this Secured Bond (the Lender or such subsequent holder hereinafter referred to as the "**Holder**") upon the order in writing of the Holder, at 1550 - 625 Howe Street Vancouver, British Columbia, V6C 2T6, or such other address as the Holder may direct by written notice to Magma Sweden, the principal amount of US$35,689,255.00, in lawful money of United States of America (the "**Principal Amount**") on October 23, 2021 (the "**Maturity Date**"), together with interest at the rate of 8.5% per annum, calculated on the basis of a 360-day year and the number of days elapsed, accruing from and including October 24, 2016 (the "**Closing Date**") on the Principal Amount outstanding from time to time.

An origination fee of US$713,785.10 (representing 2% of the Principal Amount) (the "**Upfront Fee**") is payable by Magma Sweden to the Lender on the Closing Date in connection with this Secured Bond; *provided that*, such Upfront Fee shall be reimbursed by the Lender to Magma Sweden (or set-off from amounts then owing to the Lender) in the event the Principal and accrued interest under this Secured Bond is repaid in full within six months of the date hereof.

While this Secured Bond is outstanding, any portion of the Principal Amount outstanding and interest accrued thereon may be prepaid to the Holder, without notice, bonus or penalty.

Interest is payable on the Principal Amount outstanding for the previous twelve (12) month period, annually on October 23rd of each year until and including the Maturity Date.

The Principal Amount and interest owing under this Secured Bond shall be paid without any set¬off or abatement.

Each of the events set out below is an event of default ("**Event of Default**"):

(a) **Overdue payments:** Magma Sweden fails to pay any amount payable by it under this Secured Bond when due and such failure to pay shall continue for three Business Days.

(b) **Default under Share Pledge:** Magma Sweden breaches in any way its obligations according to the share pledge agreement made by Magma Sweden in favour of the Lender dated October 24, 2016 (the "**Share Pledge**"), regarding shares in HS Orka hf., always provided that Magma Sweden in the event of such breach (in the sole opinion of the Holder, acting reasonably) has not remedied such breach within 30 days from the date Magma Sweden receives notice from Holder thereof.

(c) **Change of ownership:** Any person, or combination of persons acting jointly or in concert, acquires shares of Magma Sweden entitling the holders of such shares to cast more than 50% of the votes carried by all shares of Magma Sweden having the right to vote for the election of directors of Magma Sweden.

(d) **Disposal of assets of HS Orka hf.:** Except with the written consent of the Lender, not to be unreasonably withheld, conditioned or delayed, Magma Sweden enters into a transaction in which Magma Sweden acquires material properties or assets of HS Orka hf. except upon fair and reasonable terms no less favorable to HS Orka hf. than would be obtainable in a comparable arm's length transaction with a person other than Magma Sweden.

(e) **Legal process:** Any judgment or order made against Magma Sweden is not stayed or complied with within sixty days unless the same is being contested in good faith by appropriate proceedings. A creditor attaches or takes possession of, or a distress, execution, sequestration or other process is levied or enforced upon or against, any of the undertakings, assets, rights or revenues of Magma Sweden in the event such occurrence would reasonably be expected to have a material adverse effect on Magma Sweden in the discretion of the Lender, acting reasonably, and is not discharged within sixty days, unless the same is being contested in good faith by appropriate proceedings.

(f) **Insolvency; compositions:** Magma Sweden:

(i) stops or suspends payment of any of its indebtedness;

(ii) is unable to or admits an inability to pay any of its indebtedness as it falls due ;

(iii) commences negotiations with one or more of its creditors with a view to the general readjustment or rescheduling of its indebtedness in connection with an anticipated insolvency;

(iv) proposes or enters into any composition or other arrangement for the benefit of its creditors generally or any class of creditors in connection with an anticipated insolvency;

(v) has proceedings commenced against it under any law, regulation or procedure relating to reconstruction or readjustment of its indebtedness in connection with an anticipated insolvency, and such proceeding is not stayed within thirty days, unless such proceeding is being contested in good faith by appropriate proceedings.

(g) **Bankruptcy or insolvency proceedings by Magma Sweden:** Magma Sweden takes any action or any legal proceedings are started by Magma Sweden or other steps are taken by Magma Sweden for (i) Magma Sweden to be adjudicated or found bankrupt or insolvent, (ii) the winding-up or dissolution of Magma Sweden or (iii) the appointment of a liquidator, administrator, trustee, receiver or similar officer of Magma Sweden or the whole or any part of its respective undertaking, assets, rights or revenues.

(h) **Bankruptcy or insolvency proceedings against Magma Sweden:** Any legal proceedings are started by any party other than Magma Sweden or other steps taken by any party other than Magma Sweden for (i) Magma Sweden to be adjudicated or found bankrupt or insolvent, (ii) the winding-up or dissolution of Magma Sweden or (iii) the appointment of a liquidator, administrator, trustee, receiver or similar officer of Magma Sweden or the whole or any part of its respective undertaking, assets, rights or revenues, and such steps or proceedings are not stayed within thirty days, unless such steps or proceedings are being contested in good faith by appropriate proceedings.

For greater certainty, and notwithstanding anything in paragraphs (e), (f), (g) or (h) hereof, the Lender expressly acknowledges, confirms, and agrees that: (i) Magma Sweden is indebted to Fagfjarfestasjodsins ORK ("**FORK**") under a bond due on June 16, 2017 (the "**FORK Bond**") and to OR under the OR Bond, and also acknowledges that Magma Sweden will repay, extend, refinance or deliver certain collateral to FORK under the FORK Bond and to OR under the OR Bond, respectively, during the term of this Secured Bond; (ii) the Lender will not assert that: (A) any such repayment, extension, refinancing, or delivery of collateral to FORK or OR, as applicable, or any assignee thereof or any refinancier of the Fork Bond or the OR Bond, as applicable; or (B) a default or judgment against Magma Sweden in respect of its obligations and liabilities under the Fork Bond or OR Bond or any refinancing thereof, in each case, is an Event of Default under this Secured Bond or the Share Pledge; and (iii) an event of default under the Fork Bond or the OR Bond shall not be an "Event of Default" under this Secured Bond or the Share Pledge.

Any costs, taxes, charges and expenses (including external and internal legal fees) incurred by the Holder in connection with:

(a) the preparation of this Secured Bond and the establishment of the loans provided herein; or

(b) the enforcement and preservation of the Holder's rights under this Secured Bond or the Share Pledge,

shall be payable by Magma Sweden to the Holder on the date of incurrence, and Magma Sweden shall reimburse the Holder for the full amount of such costs, taxes, charges and expenses (including external and internal legal fees).

Any and all payments by Magma Sweden under this Secured Bond shall be made free and clear of and without deduction or withholding for taxes (including, without limitation, non-resident withholding taxes, and referred to herein as "**Withholding Taxes**") unless such Withholding Taxes are required by applicable law to be deducted or withheld. If Magma Sweden is required by applicable law to deduct or withhold any Withholding Taxes from or in respect of any sum payable pursuant to this Secured Bond, then to the extent (and only to the extent) the amount of applicable Withholding Taxes exceeds the amount of any tax credit and the value of any tax deduction available in respect thereof, Magma Sweden shall pay an additional sum (net of any additional Withholding Taxes applicable to such additional sum) equal to the excess (the "**Gross-Up Mechanism**"). The Gross-Up Mechanism shall only apply to the benefit of the Lender and for so long as the Lender remains resident in Canada and the beneficial owner of the payment under the Canada-Sweden Tax Treaty, and shall apply for the benefit of a person who is an heir, executor, administrator, successor or assign of the Lender only to the extent the Withholding Taxes applicable to payments made to such person are no greater than those that would have been applicable to the Lender as a resident of Canada.

In the case of any Event of Default, as described above, and at any time thereafter if any such event shall then be continuing, the Holder may by notice to Magma Sweden accelerate all debt owing pursuant to this Secured Bond and declare it to be immediately due and payable whereupon the same shall become immediately due and payable together with all interest accrued thereon and all other amounts payable hereunder. In such events Magma Sweden shall pay penalty interest on such amount or accelerated amount from the due date until payment is received by the Holder. The penalty interest shall be 12.0% per annum.

The Holder may from time to time and at any time transfer this Secured Bond or any part thereof. Unless otherwise stated in this Secured Bond, all of the rights, obligations, terms and conditions of this Secured Bond are binding upon and will enure to the benefit of Magma Sweden and the Holder, and their respective heirs, executors, administrators, successors and assigns. For greater certainty, Magma Sweden shall bear its own costs, taxes, charges and expenses (including external and internal legal fees) incurred in connection with any such transfer of this Secured Bond or any part thereof by the Holder.

This Secured Bond shall be secured by the Share Pledge pursuant to which Magma Sweden shall grant to the Lender a security interest in certain shares of HS Orka hf. described therein as collateral, and all proceeds thereof.

Notwithstanding any other provision of this Secured Bond, the Holder's recourse under this Secured Bond shall be limited to enforcement of the Share Pledge only. The Holder shall have no additional recourse against Magma Sweden or any affiliate of Magma Sweden. If the Holder shall take judgment against Magma Sweden in respect of its obligations and liabilities under this Secured Bond, the Holder will not seek to effect recovery from Magma Sweden under any such judgment otherwise than from the realization of the security constituted by the Share Pledge, and the Holder will not register, record or file any such judgment or any notice thereof in any office or registry against Magma Sweden or its property and assets, other than the collateral subject to the security interest created by the Share Pledge.

The laws of the Province of British Columbia, Canada will apply to the interpretation and enforcement of this Secured Bond. Any dispute arising from this Secured Bond may be brought before the courts of the Province of British Columbia, Canada.

When used herein, the term "**Business Day**" shall mean a day other than: (i) Saturday; or (ii) Sunday; or (iii) other day in which the banks are not open for business in Vancouver, British Columbia or Stockholm, Sweden.

Magma Sweden hereby waives presentment and notice of dishonor, protest and notice of protest. No delay by the Holder in exercising any power or right hereunder will operate as a waiver of power or right preclude other or further exercise thereof, or the exercise of any other power or right hereunder or otherwise.

IN WITNESS WHEREOF Magma Sweden has issued this Secured Bond this 24th day of October, 2016 in Vancouver, Canada.

MAGMA ENERGY SWEDEN A.B.

By: *"Signed Lyle Braaten"*
Name: Lyle Braaten
Title: Director