



PETROLEUM PRODUCTION LICENCE

THIS DEED IS MADE this 30th September 2020, between Honourable Vickram Bharrat, the Minister of Natural Resources being the Minister Responsible for Petroleum of the Co-operative Republic of Guyana (hereinafter referred to as "the **Minister**") of the one part;

-And-

Esso Exploration and Production Guyana Limited, a company incorporated in the Bahamas and registered in Guyana as an external company pursuant to the Companies Act, 1991, with a registered office at 99 New Market Street, Georgetown, Guyana (hereinafter referred to as "Esso"), **CNOOC Petroleum Guyana Limited**, a company incorporated in Barbados and registered in Guyana as an external company pursuant to the Companies Act, 1991, with a registered office at 62 Hadfield And Cross Streets, Werk-en-Rust, Georgetown, Guyana, and **Hess Guyana Exploration Limited**, a company incorporated in Bermuda and registered in Guyana as an external company pursuant to the Companies Act, 1991, with a registered office at 62 Hadfield And Cross Streets, Werk-en-Rust, Georgetown, Guyana, all together hereinafter referred to as the "Joint Venture Licensees" or the "Licensee" as appropriate) of the other part.

WHEREAS pursuant to the Petroleum (Exploration and Production) Act No. 3 of 1986 (hereinafter referred to as the "Act") and the Regulations made thereunder, the Licensee has applied to the Minister for the grant of a Petroleum Production Licence in respect of the block or blocks constituting the production area described and identified in the Schedule hereto and shown on the map in the said Schedule;

AND WHEREAS, the area so described and identified in the Licensee's said application for the grant of a Petroleum Production Licence includes parts of reservoirs which are also within the production area described and identified in and subject to Petroleum Production Licence No. 971/2017, dated 15th day of June 2017 (the "Licence"), granted to the Joint Venture Licensees for the





Stabroek Block Liza Production Area (the "Liza Production Area"), such parts of reservoirs being further described, identified and shown on the map in the Schedule hereto (the "Cross Licence Reservoirs");

AND WHEREAS Section 44 of the Act allows for the co-ordination of operations for the recovery of petroleum being carried on, or to be carried on, in a production area, in which part of the reservoir is located with operations for the recovery of petroleum being carried on, or to be carried on, in any other area in which another part of the same reservoir is located;

AND WHEREAS for the purpose of securing more effective recovery of petroleum from such Cross Licence Reservoirs, the Licensee desires to co-ordinate operations for the recovery of petroleum being carried on, or to be carried on, in the Payara Production Area with operations for the recovery of petroleum being carried on, or to be carried on, in the Liza Production Area;

AND WHEREAS, the Licensee has included with the said application the Licensee's detailed proposals for the construction, establishment and operation of certain facilities and services for and incidental to the recovery, processing, storage and transportation of petroleum from the Payara Production Area and the Liza Production Area, which proposals constitute the proposed Development Plan: Payara Project document number GYPY-BPFDP-00-0001, Rev 1 dated 20 July, 2020, as such plan may hereafter be amended from time to time with the approval of the Minister, (the "Development Plan");

AND WHEREAS after conducting due examination of the details and data contained in the Licensee's said application for the grant of a Petroleum Production Licence over an area that includes the Cross Licence Reservoirs, such details and data being in keeping with the provisions of the Act and the Regulations made thereunder and contained in the Payara Project Field Development Plan GYPY-BPFDP-00-0001, Rev 1 dated 20 July, 2020, and in furtherance of the Government of the Cooperative Republic of Guyana's responsibility to prudently manage Guyana's petroleum resources for the benefit of all Guyanese, present and future, through the employment of good international oilfield practices, the Minister is satisfied that the Cross Licence Reservoirs may be better developed in keeping with the said application for the reasons more fully set out and described, in the Development Plan.





AND WHEREAS by virtue of all the foregoing, the said application by the Licensee for the grant of Petroleum Production Licence over an area that includes the Cross Licence Reservoirs is duly made pursuant to the Act and the Regulations made thereunder;

AND WHEREAS, the Minister has approved the Development Plan pursuant to the notice issued to Licensee dated 25 September 2020;

NOW, THEREFORE in exercise of the powers conferred upon the Minister by section 35(1) of the Act, I, Honourable Vickram Bharrat, Minister of Natural Resources and the Minister Responsible for Petroleum, do hereby grant to the Joint Venture Licensees for a period of twenty (20) years next after the date hereof, this petroleum production licence (the "Licence") in respect of the block or blocks constituting the production area (the "Area") described and identified and shown on the map in the Schedule hereto, conferring on the Licensee, subject to the said Act and the Regulations, and conditions specified hereunder or to which the Licence is otherwise subject, exclusive rights –

- (a) to carry on prospecting and production operations in the production area;
 - (b) to sell or otherwise dispose of petroleum recovered; and
 - (c) to carry on such operations and execute such works in the production area as are necessary for, or in connection with, any matter referred to in paragraph (a) or (b) above.
2. This Petroleum Production Licence is granted subject to the following conditions: –
- (a) The Licensee shall give effect to the Petroleum Agreement entered into by the Licensee for a licence, such Petroleum Agreement being executed on the 27th day of June 2016 and effective as of the 7th day of October 2016.
 - (b) Subject to the Petroleum Agreement, the Licensee shall supply petroleum or petroleum products to the extent specified by the Minister from time to time to meet the requirements of Guyana.





- (c) Subject to the Petroleum Agreement, the Licensee shall comply with such orders as may be made by the Minister from time to time with respect to the refining, disposal or sale of petroleum which may be recovered in the production area.
- (d) The Licensee shall before commencing any production operations in the said production area furnish to the Chief Inspector the name and address of the Manager resident in the locality of the said area under whose supervision such operations are to be carried on. Any notice which the Minister or any person authorised by him is in conformity with this Licence required or entitled to serve upon the Licensee shall be sufficiently served if the same shall be delivered or sent by post to such Manager at such address.
- (e) The Licensee shall not remove petroleum from the area from which it has been obtained to any other area, or dispose of in any manner without the written consent of the Minister or the Chief Inspector.

(f) Licensee Conditions

- (i) Any obligations which are to be observed and performed by the Licensee under this Licence shall be joint and several obligations.
- (ii) The Operator shall be Esso Exploration and Production Guyana Limited, which Operator may only be changed by the Licensee to another party not comprising the Licensee as of the date of this Licence, with the written consent of the Minister.

(g) Unit Development

In respect of each petroleum reservoir in this Petroleum Production Licence where the recovery of petroleum is to occur and where part of such reservoir is included in the Payara licence area and part in the Liza licence area (a 'Cross Licence Reservoir'), the Licensee shall carry out unit development petroleum operations for the development of such Cross Licence Reservoirs for the purposes of

- a) securing more effective recovery of petroleum from such Cross Licence Reservoirs; and
- b) attaining the most efficient and beneficial management, development and operation as a single consolidated reservoir, for the prevention of waste, the promotion of conservation and increasing the recovery of petroleum.





(h) Work Commitments

- (i) The Licensee shall adhere in all material respects to the Development Plan and the tenets thereof which shall constitute the Licensee's work commitments for the licensed area.
- (ii) The Development Plan including all its modifications, amendments, replacements, substitutions or conditions shall constitute an Attachment to this Licence and shall form part of the Licence.
- (iii) The Licensee shall not carry out any other development plan either in the licensed Area or elsewhere, except with the consent in writing of the Minister or in accordance with the Development Plan which the Minister has approved.

(i) Liza Deep

- (i) The Licensee shall conduct a study to evaluate appraisal and development planning options for Liza Deep, as outlined in Appendix D of the Development Plan. Within thirty (30) days from the date of the Licence, the Licensee shall submit the terms of reference of the study for the approval of the Minister. The report for the study will be due within nine (9) months from the approval date of the terms of reference. The Minister will review the report and decide to approve the report or grant the Licensee an additional six (6) months to resubmit a revised report for approval. Based on the final report and the Guyana Geology and Mines Commission's assessment of the findings in the final report, along with any other related matters, the Licensee and the Minister shall discuss and seek to reach agreement on such further designation in respect of Liza Deep as may be appropriate.

(j) Additional Studies

- (i) The Licensee shall also conduct the studies outlined in Appendix D of the Development Plan. Within sixty (60) days from the date of the Licence, the Licensee shall submit the terms of reference of such studies for the approval of the Minister. The report for the studies will be due





twelve (12) months from the approval date of the terms of reference. The report related to such studies shall not be final until approved by the Minister, taking into account whether the report meets the terms of reference and all related best practice technical standards.

(k) Cost Estimates

(i) Within ninety (90) days from the date of the Licence, the Licensee shall submit reports in the format and degree of detail no less than that as set out in Schedules X1 (Development Costs Estimates) and X2 (Operating Costs Estimates) as follows:

- a. Schedule X1 - Development Cost Estimates for Payara;
- b. Schedule X2 - Operating Cost Estimates for Payara;

(ii) Within one hundred and eighty (180) days from the date of the Licence, the Licensee shall submit a report in the format and degree of detail no less than that as set out in Schedule X2 (Operating Costs Estimates) as follows:

Schedule X2 - Breakdown of Actual Operating Costs for the first year (or such shorter period as has completed as of the date of the report) of operation of Liza Phase 1;

(l) Royalty

The Licensee shall provide for the payment of royalties in accordance with: (i) the Act, the regulations made thereunder, this Licence or such other applicable law, as amended from time to time and (ii) the Petroleum Agreement as amended from time to time.

(m) Measurements

(i) The Licensee shall measure and weigh (the "measurements") the volume, quality and composition of all petroleum won and saved from the subject to the License using the measurement appliances and procedures in accordance with good international oilfield practices, the Development Plan, and as from time to time approved by the Minister.





- (ii) The Licensee shall provide to the Minister, reasonable notice of the conducting of and an opportunity to attend the measurements or to have a representative attend on his behalf.
- (iii) The Licensee shall provide to the Minister, reasonable and written notice and the opportunity to be present, either in person, or through a representative(s) when an equipment or appliance for measuring or weighing crude oil or gas is being calibrated, re-calibrated, tested, compared, measured or weighed against a standard in accordance with good international oilfield practices and as approved in writing by the Minister; and any such calibration shall be in accordance with accepted methods and procedures previously approved in writing by the Minister.
- (iv) The Licensee shall not make any alteration in the method or methods of the measurements used by him or in any equipment or appliances used for the purpose without the prior consent in writing of the Minister, and the Minister may in any case require that no alteration shall be made save in the presence of a person authorised by him.
- (v) The Licensee shall be responsible for the payment of such fees and expenses for tests and examinations of any measuring or weighing appliance tested or examined in such manner, upon such occasions or at such intervals and by such means, in any case, as may be specified as directed by the Minister.

(n) Production Statement Conditions

- (i) The Licensee shall submit daily production statements to the Minister in respect of Stabroek Block production, including such particulars as the Minister may from time to time direct.
- (ii) The production statements required to be submitted by the Licensee to the Minister in keeping with the Act, Regulations and Petroleum Agreement shall include such other particulars as the Minister may from time to time direct.
- (iii) The Minister may serve notice in writing on the Licensee determining any other manner in which any quantity of petroleum or any quantity of any form of petroleum is to be expressed in production statements, such manner to be in keeping with good international oilfield practices.
- (iv) Production statements shall state separately, in the case of petroleum in the form of gas, the specific gravity of the petroleum and if petroleum is





substantially different specific gravities has been won and saved, the respective quantities of petroleum of each specific gravity.

(o) Local Content and Participation

- (i) Not less than sixty (60) days prior to the beginning of each year, the Licensee shall submit to the Minister a yearly Local Content Plan which shall detail Licensee's objectives, utilisation levels, activities and programs aimed at compliance with its obligations under the Petroleum Agreement, applicable law and government policy. Following the submission of the plan, the Contractor shall meet with the Minister to discuss and consider the effectiveness of the plan. Within twenty-one (21) days of receipt from the Minister of any proposed modifications to the Local Content Plan, the Licensee shall submit to the Minister a final Local Content Plan for approval, inclusive of any agreed modifications. The Minister shall determine final approval of the Local Content Plan.
- (ii) The Licensee shall gather information on progress in achieving the objectives, utilisation levels, activities and programs described in their yearly Local Content Plan, sufficient to inform half-year and end-of-year Local Content Reports to the Minister. This information shall be retained by the Licensee in sufficient detail to facilitate verification for a period of five (5) years.
- (iii) The Licensee shall provide to the Minister, at a minimum, half-year and end-of-year Local Content Reports submitted within thirty (30) days of the end of each half calendar year detailing and quantifying its achievements in respect of the objectives, utilisation levels, activities and programs described in its yearly Local Content Plan.
- (iv) The Licensee shall permit an agent designated by the Minister to access records of the Licensee and its primary contractors for the purpose of assessment and verification of the information provided in Licensee's Local Content Plans and Local Content Reports. The Licensee shall include the necessary provisions in contractual arrangements with primary contractors to enable such assessment and verification by the Minister or his/her agent.
- (v) The Licensee shall identify all opportunities available for local content in the fabrication requirements of the Payara Development — the subsurface facilities and supporting services. The Licensee must





components of fabrication that can be performed using local content and detail plans for the Licensee to develop the capacity for such local content.

(p) Health Safety and the Environment

- (i) The Licensee shall abide by the Environmental Protection Act 1996, Regulations made thereunder and the terms and conditions of the Environmental Permit issued by the Environmental Protection Agency Reference No. 20181204-PPOIX and dated 24 September 2020.
- (ii) The Licensee shall abide by Occupational Health and Safety Act 1997, Regulations made thereunder and all applicable laws and regulations of Guyana relating to occupational health and safety in effect from time to time, as amended, enacted and augmented.
- (iii) The Licensee shall at all times maintain adequate expert personnel and equipment to prevent and/or respond to any spillage of petroleum into the marine environment.
- (iv) The Licensee shall ensure that standards in keeping with the laws and regulations of Guyana and good international oilfield practices are implemented, upgraded from time to time and continuously adhered to so as to ensure the safety of all personnel and ensure the protection of the marine environment.

(q) Dispersants

- (i) Within ninety (90) days from the date of the Licence, the Licensee shall provide a report calculating the appropriate volume of dispersants sufficient for immediate deployment for any Tier 3 event. The report shall not be deemed final until approved by the Minister.
- (ii) Thereafter the Licensee shall maintain throughout the Licence term such volume of dispersants and the required deployment equipment so as to sufficiently and effectively deal with any Tier 3 event.

(r) Capping Stack

- (i) The Licensee shall maintain access to one or more subscription services as necessary to allow mobilization of a Capping Stack to the Payara Project.





location within five (5) days or less of an uncontrolled well event, consistent with the Capping Stack Report.

- (ii) Within thirty (30) days of the date of the Environmental Permit, the Licensee shall submit to the Minister and EPA for approval, terms of reference for a study detailing the implementation of a system that allows for deployment of a Capping Stack and Debris Removal Systems within three (3) days and four (4) days of an uncontrolled well event, including the costs, timing, feasibility and benefits of implementing each such system.
- (iii) The Licensee shall, within three (3) months of the date of Licence, supplement its in-country First Response Toolkit to include all elements of the Essential First Response Toolkit, as outlined in the Capping Stack Report, excluding those elements requiring longer manufacturing times or otherwise not readily available. Such longer-lead elements will be identified within thirty (30) days of the date of the Licence and shall be promptly completed and delivered to Guyana, but in no event shall delivery be later than nine (9) months from the date of the Licence.
- (iv) Within one hundred and eighty (180) days of the date of the Minister's approval of the terms of reference, the Licensee shall complete the study's final report.
- (v) During the pendency of the study the Licensee shall meet with the Minister and/or his representatives no less than every thirty (30) days, or more frequently on request, to provide an update on the progress of the study, discuss the issues raised by the study and come to agreement on resolution of issues and/or concerns regarding the study.
- (vi) Thirty (30) days before completion of the study, the Licensee will issue a draft final report to enable the Minister to input into the final report. The final report shall not be deemed final until approved by the Minister, taking into account whether the report meets the terms of reference and all related best practice technical standards.

(s) Flaring

- (i) Routine flaring of gas by the Licensee is strictly prohibited ^{without} approval. Flaring is only permissible under the following conditions (as defined in the Licensee's Environmental Permit):





- a. Commissioning and Start-up: the Licensee shall not exceed sixty (60) days of flaring during Start-up; and
- b. Special Circumstances, including:
 - i) Emergencies;
 - ii) Maintenance; and
 - iii) Restart

or as allowed under the Environmental Permit or approved by the Environmental Protection Agency.

- (ii) Flaring to maintain oil production should any part of the gas handling system have failed will not be permitted save and except where approval has been obtained to flare from the Environmental Protection Agency.
- (iii) Within thirty (30) days of the date of Licence, the Licensee shall submit to the Minister for approval, terms of reference for such study that will show in detail how the objective described above will be achieved whilst maintaining, to the extent practical, currently predicted project production profiles.
- (iv) During the pendency of the study the Licensee shall meet with the Minister and/or his representatives no less than every thirty (30) days, or more frequently on request, to provide an update on the progress of the study, discuss the issues raised by the study and come to agreement on resolution of issues and/or concerns regarding the study.
- (v) Thirty (30) days before completion of the study, the Licensee will issue a draft final report to enable the Minister to input into the final report. Within one hundred and eighty (180) days of the date of approval of the terms of reference, the Licensee shall submit the study's final report to the Minister. The final report shall not be deemed final until approved by the Minister.
- (vi) The Licensee shall report to the Minister within twenty-four (24) hours all incidences of gas flaring, whether within or without the parameters set forth herein, and the reasons for such flaring.
- (vii) The Licensee shall pay all fines imposed in respect of flaring in violation of the Environmental Permit –





- a. by law;
- b. by the EPA ; and
- c. in accordance with the terms of a framework to be established by the Minister to compensate the Government. The fine shall be calculated by applying the Government's profit gas and royalty percentage share for a given month to the flared volumes multiplied by the lower of the following: i) the Inside FERC Henry Hub Index price as published by Platts each month, or ii) the sales price agreed for gas from the Stabroek block, such price netted for the cost of pipeline transportation to shore per thousand standard cubic feet of gas.

(t) Produced Water

- (i) The Licensee shall update its base design for the Project to include (i) tie in points and (ii) space for produced water injection equipment.
- (ii) Within thirty (30) days of the date of Environmental Permit, the Licensee shall submit to the Minister and EPA for approval, terms of reference for a study detailing –
 - a. the costs, benefits, and feasibility of implementing a system for the re-injection of produced water, save and except in defined unavoidable situations, as the primary disposal method; and
 - b. the minimization of the effects of discharging produced water into the ocean in keeping with accepted international standards. Within one hundred and eighty (180) days of the date of the Minister's approval of the terms of reference, the Licensee shall complete the study's final report.
- (iii) During the pendency of the study the Licensee shall meet with the Minister and/or his representatives no less than every thirty (30) days, or more frequently on request, to provide an update on the progress of the study, discuss the issues raised by the study and come to agreement on resolution of issues and/or concerns regarding the study.
- (iv) Thirty (30) days before completion of the study, the Licensee will issue a draft final report to enable the Minister to provide input into the final report. The final report shall not be deemed final until approved by the





Minister, taking into account whether the report meets the terms of reference and all related best practice technical standards.

(u) Formation Integrity

- (i) Except for periods where fracture test(s) are conducted on injection wells to estimate formation fracture pressures, injection well pressures must be targeted to operate at least fifty (50) psi below the most recently estimated formation fracture pressure, as periodically estimated through injection tests or other surveillance techniques.
- (ii) The Licensee shall within ninety (90) Days of the date of the Licence provide a plan to conduct the fracture test(s) and to implement this in its operations.
- (iii) The plan shall not be deemed final until approved by the Minister, taking into account whether the report meets the terms of reference and all related best practice technical standards.

(v) Block Seismic Activity

- (i) Licensee shall complete an analysis of natural seismic activity and magnitude from events such as earthquakes, volcanoes, etc. The analysis must consider the potential impact of the injection of fluids on such activities.
- (ii) Within thirty (30) days from the date of the Licence, the Licensee will propose for approval by the Minister, terms of reference for a study to investigate and analyse seismic activity, including events such as earthquakes, volcanoes, etc., such study to include the potential contributory impact of the injection of fluids on the triggering of such events. Such study shall also include assessments of geology, engineering, environment, cost and economics.
- (iii) Within one hundred and eighty days (180) days of the approval of the terms of reference, the Licensee will complete the study's final report.
- (iv) During the execution of the study, the Licensee will meet with the Minister and/or his representatives at least once in each thirty (30) day period, or more frequently as requested, to provide an update on the progress of the study, discuss the issues raised by the study and come to agreement on the resolution of issues and/or concerns regarding the study.





- (v) Thirty (30) days before completion of the study, the Licensee will issue a draft final report to enable the Minister to input into the final report. The report shall not be deemed final until approved by the Minister, taking into account whether the report meets the terms of reference and all related best practice technical standards.

(w) Abandonment Programme; Decommissioning Security Agreement

- (i) Within thirty (30) days of the date of the Licence, the Minister and/or his representatives and the Licensee shall meet to discuss and determine the key principles to be addressed in the Stabroek Block Decommissioning Security Agreement.
- (ii) Within thirty (30) days from the conclusion of the discussions described in sub-paragraph (i) above, the Licensee shall submit to the Minister for review and further development, a draft Stabroek Block Decommissioning Security Agreement, such draft to contemplate timely posting of security for anticipated decommissioning costs following the methodology and approach contained in the United Kingdom Industry Model Form Decommissioning Security Agreement (Non-PRT) (October 2015) or consistent with other similar international best practice standards.
- (iii) Within thirty (30) days of the Minister providing comments on the draft Stabroek Block Decommissioning Security Agreement, the Licensee and the Minister and/or his representatives shall meet for further discussions, such discussions to be had through meetings, which may include a workshop discussion forum.
- (iv) Within nine (9) months of the date of completion of the further discussions, the Joint Venture Licensees shall use reasonable commercial efforts to agree, and no later than 31st March, 2022 shall agree, on a final version of the Stabroek Block Decommissioning Security Agreement, which shall contemplate timely posting of security for anticipated decommissioning costs following the methodology and approach contained in United Kingdom Industry Model Form Decommissioning Security Agreement (Non-PRT) (October 2015) or consistent with other similar international best practice standards, and they will present, no later than the said 31st March 2022, the mutually acceptable Stabroek Block Decommissioning Security Agreement to the Minister for review.





prior to signing by the Joint Venture Licensees, and the Agreement shall be signed by the Licensees no later than twenty (21) days after the Minister indicates completion of his review.

(x) Licence Transfer

- (i) This Licence shall not be transferred without the written consent of the Minister. Further, the Licensee shall furnish all details of any proposed transfer at the time of making the application for the transfer.
- (ii) The Licensee may apply to the Minister for the transfer of this Licence in accordance with requirements set forth by the Minister, by the Act, by Regulation and the Petroleum Agreement, and shall fulfill any other financial obligations and/or requirements under the laws of Guyana.
- (iii) The Licensee shall, in a timely manner, submit all documentation and make available such information as the Minister shall reasonably require to enable the Minister to dispose of the application.
- (iv) The Minister may refuse the application for the transfer of this Licence, if in his opinion, the person to whom the Licence is proposed to be transferred does not meet the same qualifications and capability to do the work, as the Licensee, if there has been a failure or refusal to furnish documents and information as requested, or for such other reason as the Minister shall determine.
- (v) Where the Minister approves the transfer of this License, the person to whom the Licence is transferred (the "Transferee") shall be required to comply with the provisions of the Act, Regulations, this Licence, the Petroleum Agreement, the Development Plan and any other instrument to which this Licence may be subject as though the Transferee was the original Licensee.

(y) Insurance

Licensee shall effect at all times during the term of this Licence, insurance as required by and in accordance with Article 20.3 of the Petroleum Agreement.





(z) Duties of the Licensee

- (i) The Licensee undertakes to and shall carry out all activities under this Licence in compliance with the provisions of the Act, Regulations, this Licence, the Petroleum Agreement, the Development Plan, any other law and/or instrument and/or agreement with the Government to which this Licence may be subject, as may be amended, enacted or modified from time to time, and in keeping with good international oilfield practice.
- (ii) The Licensee may, with the written approval of the Minister, amend the Development Plan with respect to work and expenditure contained in the Development Plan, but the amendment shall not have effect so as to reduce any minimum requirements.

(aa) Independent Audit

- (i) The Licensee shall facilitate and fully cooperate with annual audits of Safety Critical Drilling and Production Operations, including waste management, and compliance conducted by the Chief Inspector, pursuant to Section 61 of the Act.
- (ii) Within thirty (30) days of this Licence and annually on such date thereafter for a total of five (5) consecutive years, the Licensee shall pay to an account held and controlled by the Government the amount of four hundred thousand USD (USD400,000.00), to be used by the Government for procurement of third party auditors to supplement the Chief Inspector's resources and develop institutional capacity for the ongoing conduct of audits under this paragraph. The Licensee shall verify such account and the Minister agrees to cooperate, assist and provide the Licensee any information it requires to conduct such verification.
- (iii) The first such audit shall be targeted to conduct an assessment for calendar year 2020, and shall be conducted annually thereafter.
- (iv) The Licensee shall meet with the Chief Inspector, at his request, to ensure any issues, concerns and/or recommendations arising out of the audit are complied with and/or addressed in a manner satisfactory to the Minister as being in keeping with good international oilfield practices.





(bb) Reserves Reporting

- (i) Within twelve (12) months the Licensee shall submit to the Minister the necessary data and information in the Licensee's possession required for the Government to utilize in its own PRMS. The Minister shall request more data or information to support such effort as he deems necessary.
- (ii) The Licensee agrees to cooperate with the Chief Inspector and/or the Chief Inspector's procured reserves assessor in developing the Government's independent assessment of reserves. This cooperation shall include providing reasonable access to the required petroleum data in the Licensee's possession necessary to the Chief Inspector and/or the Chief Inspector's procured reserves assessor's evaluation and/or reports.
- (iii) The Licensee shall no less frequently than bi-annually, review its development planning activities with the Minister.

(cc) Legal Conditions

- (i) The Licensee shall comply with the terms of the Petroleum Agreement in all material respects;
- (ii) The Licensee shall comply with all lawful orders and decisions of the Minister and such other officers and functionaries of the Government with applicable authority;
- (iii) This Licence and all activities of the Licensee are subject to the laws and regulations of the Cooperative Republic of Guyana in force at any given time. Accordingly, the Licence does not limit the general right of the state to impose taxes nor the authority of the state to propose general provisions in respect of specific aspects of petroleum activities.
- (iv) The Licence does not exempt the Licensee from obtaining other licences, permits and approvals which are necessary according to the Act or other applicable laws.
- (v) The Licensee shall abide by all applicable laws and regulations of the Cooperative Republic of Guyana.
- (vi) This Licence and its conditions shall be interpreted and applied in a manner that is consistent with and gives effect to the terms and provisions of the Petroleum Agreement.





3. (1) The Licensee shall pay to the Government within the period specified therefor by the Chief Inspector, royalty in respect of petroleum obtained by him in the production area to which this Licence relates at the rate of two (2) per centum of the production won and saved from the production area or where arrangements are made in the Petroleum Agreement for payment of royalty in kind wholly or in part, by making such payment and/or deliveries in accordance with aforesaid arrangements.

(2) Subject to the provisions of the Petroleum Agreement, all petroleum that is proved to the satisfaction of the Minister to have been used by the Licensee within the production area for fuel or transportation in petroleum operations shall be free of royalty.
4. The annual licence rental charge referenced in Article 10 of the Petroleum Agreement includes and satisfies the rental charge payable in respect of the production area to which this Licence relates.
5. Unless the context otherwise requires, the terms and expressions used in this Licence shall have the same meaning as in the Act and Regulations, and if not therein defined, in the Petroleum Agreement.

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IN WITNESS WHEREOF, I Honourable Vickram Bharrat, Minister of Natural Resources and the Minister Responsible for Petroleum, have granted this Licence and set my hand and affixed the seal and the **Licensee** has set his hand and seal, the day, month and year first herein above written.

<p>Signed by:</p> <p>The Minister Responsible for Petroleum Representing the Government of the Cooperative Republic of Guyana</p>  <p>.....</p> <p>Honourable Vickram Bharrat Minister of Natural Resources Minister Responsible for Petroleum</p> 	<p>Witnesses:</p> <p> 1</p> <p>Name: Joanna E. Simmons Ministry of Natural Resources</p> <p> 2</p> <p>Name: Paul R. Wills Esso Exploration and Production Guyana Limited</p>
<p>Signed By:</p> <p>Esso Exploration and Production Guyana Limited</p>  <p>.....</p> <p>Name: Alistair G. Routledge Designation: President</p>  <p> 30th September, 2020</p>	<p>Witnesses:</p> <p> 1</p> <p>Name: Joanna E. Simmons Ministry of Natural Resources</p> <p> 2</p> <p>Name: Paul R. Wills Esso Exploration and Production Guyana Limited</p> 



<p>Signed By: CNOOC Petroleum Guyana Limited</p> <p><i>Anand R. Gohil</i></p> <p>Name: Anand Gohil Designation: Authorised Signatory</p> <p></p>	<p>Witnesses:</p> <p>1 <i>Joanna E. Simmons</i> Name: Joanna E. Simmons Ministry of Natural Resources</p> <p>2 <i>Paul R. Wills</i> Name: Paul R. Wills Esso Exploration and Production Guyana Limited</p>
<p>Signed By: Hess Guyana Exploration Limited</p> <p><i>Timothy J. Chisholm</i></p> <p>Name: Timothy J. Chisholm Designation: Director and Vice President</p> <p></p>	<p>Witnesses:</p> <p>1 <i>Joanna E. Simmons</i> Name: Joanna E. Simmons Ministry of Natural Resources</p> <p>2 <i>Paul R. Wills</i> Name: Paul R. Wills Esso Exploration and Production Guyana Limited</p>

30th September, 2020





SCHEDULE

Description and map of the block or blocks in the production area
Identification of the block or blocks within the production area



SCHEDULE

DESCRIPTION OF PAYARA PETROLEUM PRODUCTION LICENCE AREA

Description of area to be granted under Petroleum Production Licence pursuant to the Petroleum (Exploration and Production) Act. No. 3 of 1986

The area comprises approximately 279.6 square kilometers described herein consisting of graticular blocks identified herein and shown on **Block Reference Map attached.**

Latitude and Longitude Measurements are North and West respectively.

Point No.	Latitude	Longitude
1	8° 09' 58.52448" N	057° 01' 49.48284" W
2	8° 20' 27.49200" N	057° 03' 39.04200" W
3	8° 20' 27.47700" N	056° 55' 01.67100" W
4	8° 14' 00.62628" N	056° 52' 03.35892" W



SCHEDULE

DESCRIPTION OF PAYARA PETROLEUM PRODUCTION LICENCE AREA (Cont.)

The following five (5) by five (5) minute square graticular blocks describe the area. These blocks are shown on the block reference map attached.

Block K	96*, 108*, 120*, 132*
Block L	85*, 86*, 97, 98*, 109*, 110*

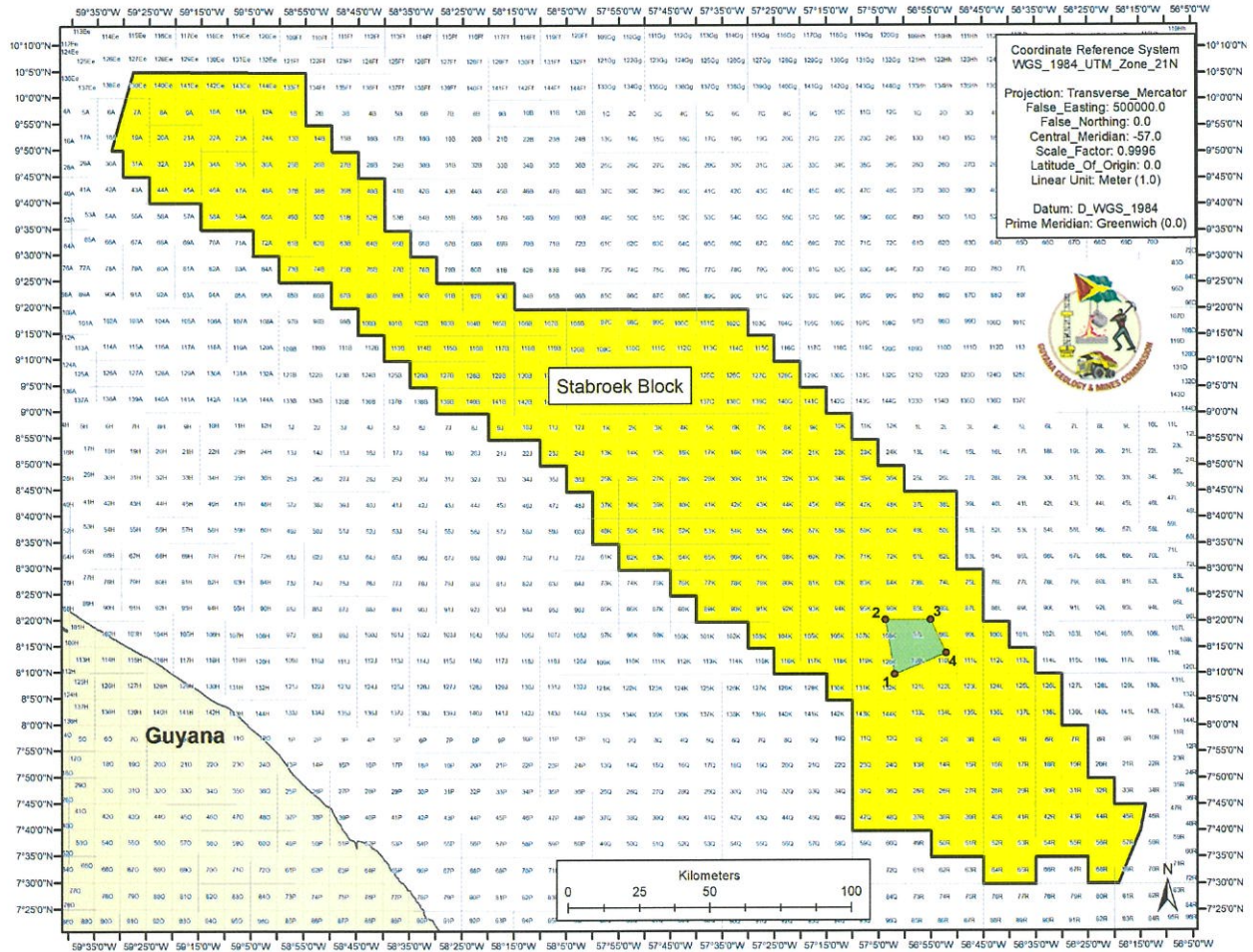
* denotes part block



ANNEX B

MAP OF CONTRACT AREA

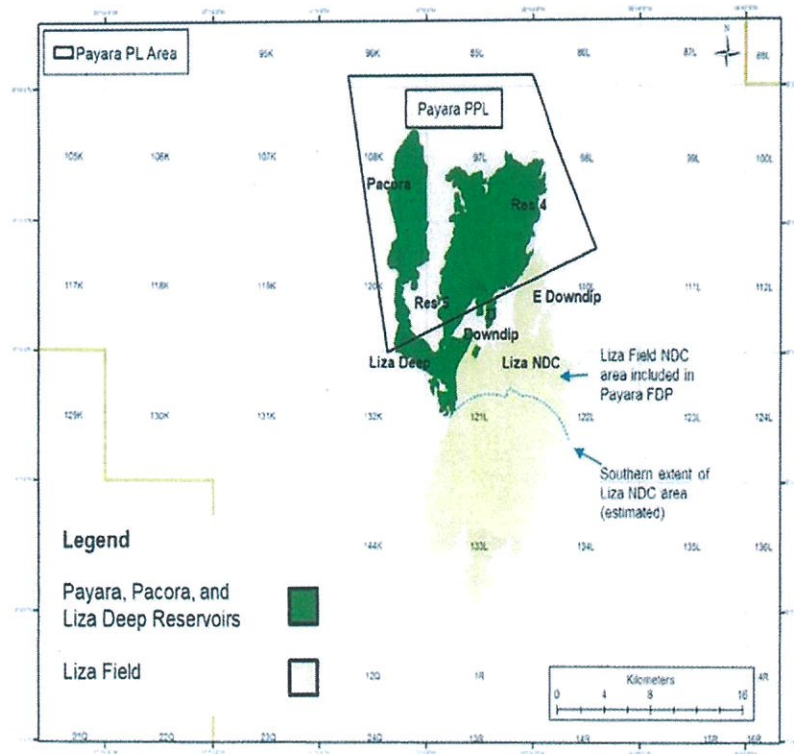
STABROEK BLOCK PAYARA PRODUCTION AREA



SCHEDULE

CROSS LICENCE RESERVOIRS

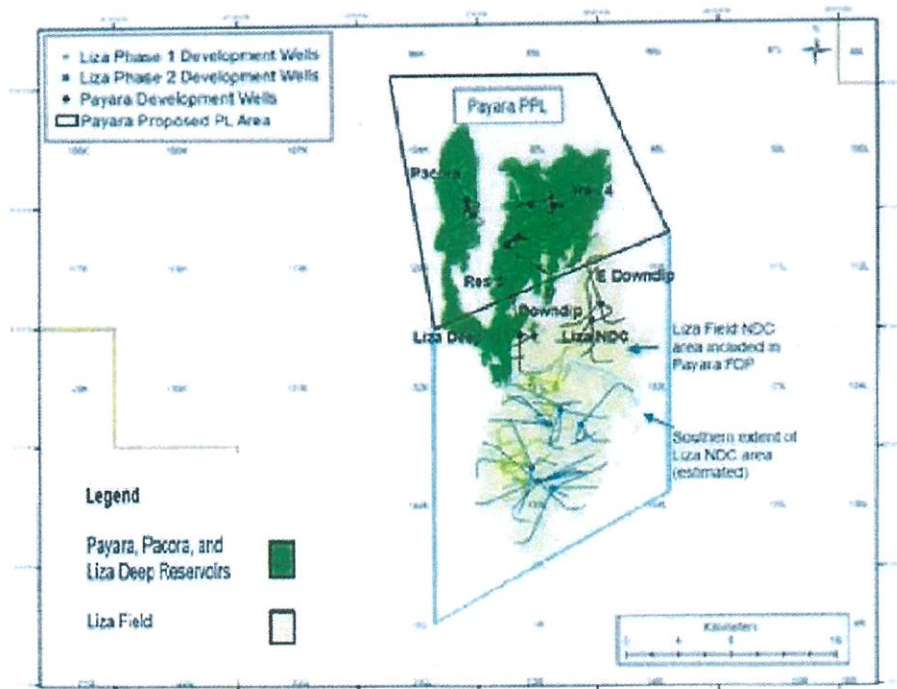
THE PARTS OF RESERVOIRS WITHIN THE PAYARA PETROLEUM PRODUCTION LICENCE AREA AND ALSO WITHIN THE PRODUCTION AREA DESCRIBED AND IDENTIFIED IN AND SUBJECT TO PETROLEUM PRODUCTION LICENCE NO. 971/2017, DATED 15TH JUNE 2017 (THE "LIZA PRODUCTION LICENCE") GRANTED FOR THE STABROEK BLOCK LIZA PRODUCTION AREA (THE "LIZA PRODUCTION AREA") (the "CROSS LICENCE RESERVOIRS") SHOWN HERE ARE ILLUSTRATIVE AND THE RESERVOIR BOUNDARIES ARE NOT DEFINITIVE.



SCHEDULE

CROSS LICENCE RESERVOIRS

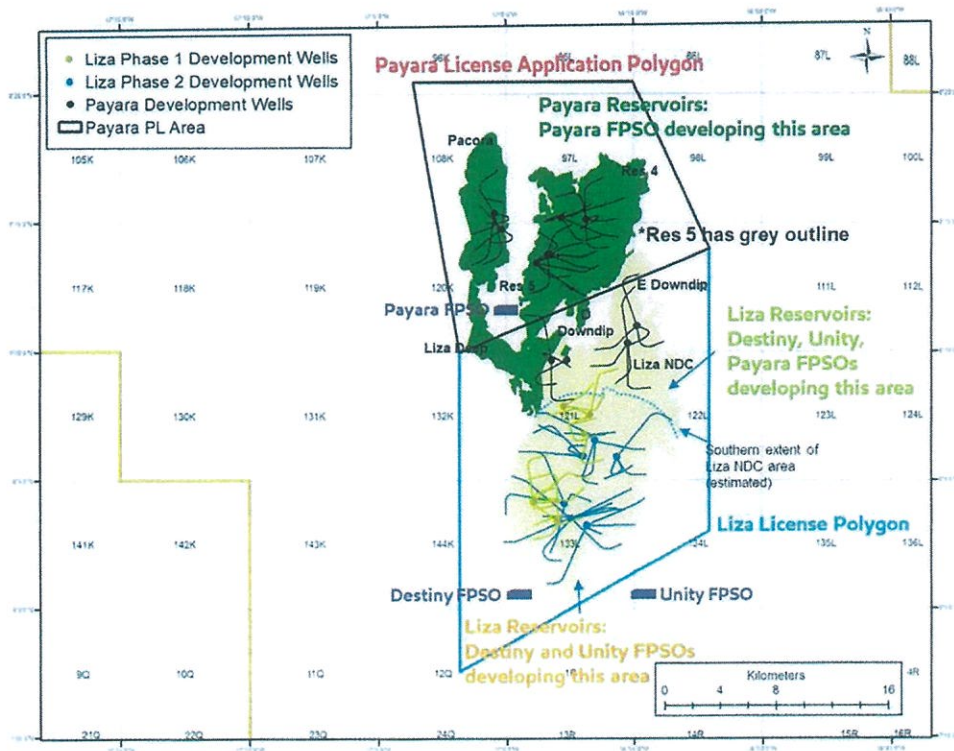
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SCHEDULE

CROSS LICENCE RESERVOIRS

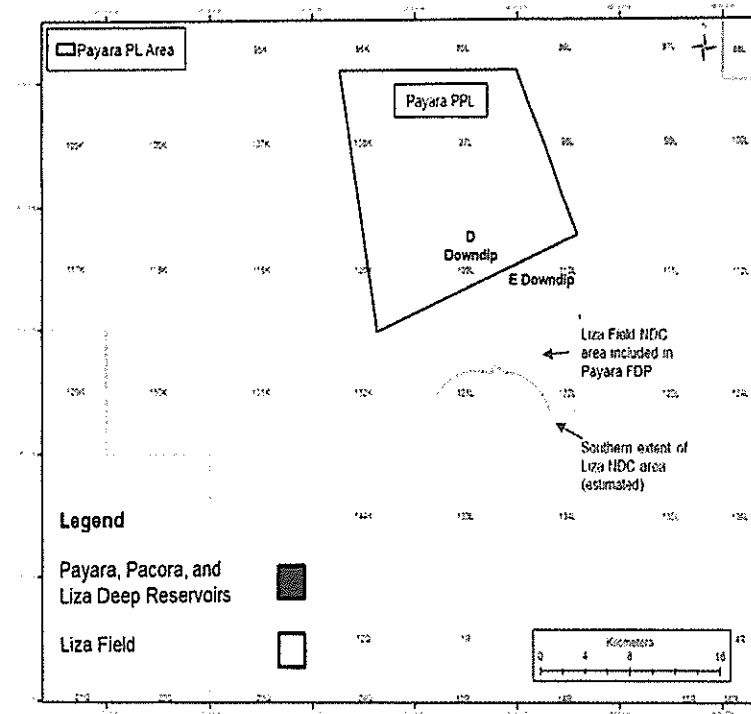
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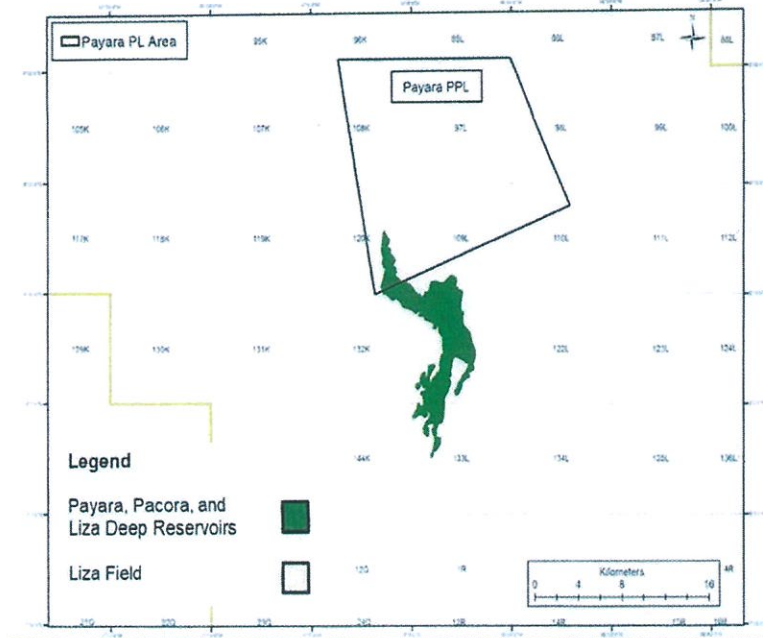
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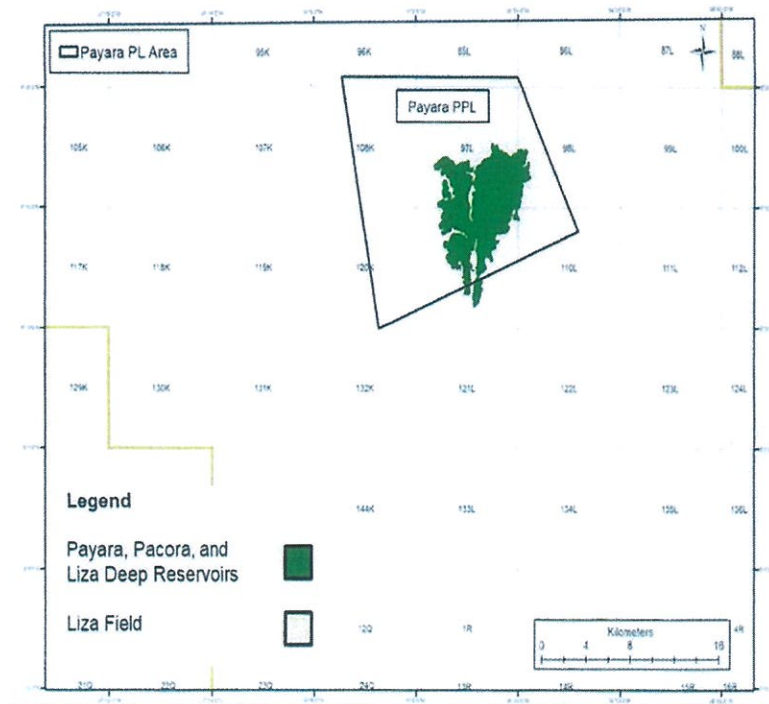
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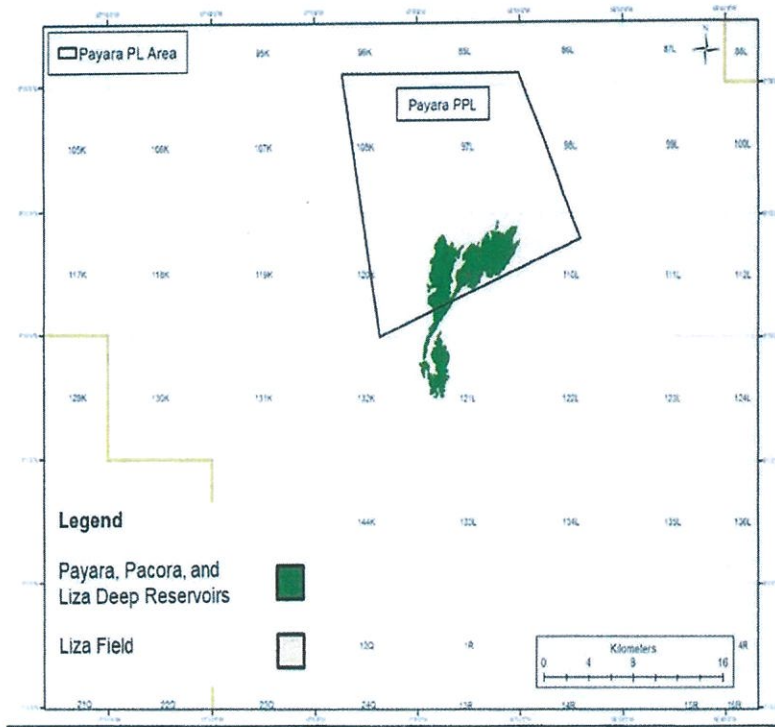
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CROSS LICENCE RESERVOIRS

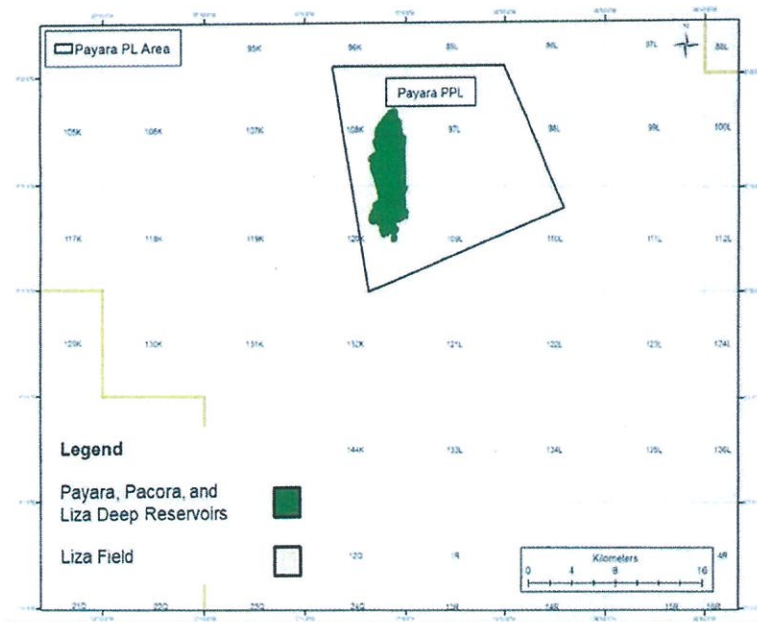
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SCHEDULE

CROSS LICENCE RESERVOIRS

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SCHEDULE

X1 Development Cost Estimates

X2 Operating Cost Estimates



X1 – DEVELOPMENT COST ESTIMATES

FEED / Pre-FID

SURF FEED

FPSO FEED

Offshore Campaign – Geotech / EBS Sampling / Drill String Removal

Subproject Costs (FPSO and SURF)

FPSO (EPC1)

FPSO Purchase (Start of Yr 2)

Hull / Marine

Vessel Tanker

Marine Systems

Riser Balcony & Mooring Porch

Moorings

Fluid Offloading Lines

Engineering

Project Management

Construction Management

Topsides

Bulks – Material

Equipment

Fabrication

Yard Integration and Commissioning

Engineering

Project Management

Construction Management

Other EPC

FPSO Transportation



FPSO Offshore Installation Mobilization & Demobilization
Offshore Hook-up and Commissioning

Contractor Other

Contingency
Risk, Overhead
Insurance
Construction Financing
Bank Guarantee

FPSO (1-yr Lease + Debt Financing)

FPSO (Lump Sum Payments)

FPSO (CAPEX Spend: Provisional Sums, Allowances, Options)

Contractor Pre-SU Ops (RFO Contract)

SURF

Subsea Systems (EPC2)

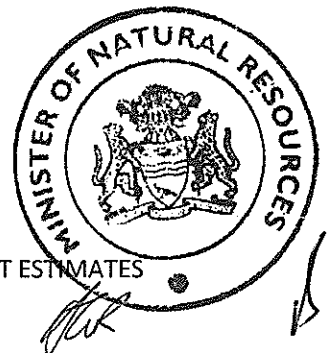
Goods Lump Sum Costs

Subsea Tree System Equipment

Production Tree System
Injection Tree System Smart
Gas Injection Tree System
Tree and THS Handling and Installation Tools
Tree System ROV Tools
ROV-Based Workover Control System

Manifold Systems

Production Manifold System (including Foundation)
Water Alternating Gas Manifold System (including Foundation)
Manifold System ROV Tools
Manifold Installation Tooling



Well Jumpers

Production Well Jumpers
Water Injection Well Jumpers
Gas Injection Well Jumpers
Well Jumper Tools

Flowline Jumper Connectors and FLET / PLET Equipment

Production Flowline Jumpers
Gas Injection Pipeline Jumpers
Water Injection Pipeline Jumpers
Flowline/Pipeline Jumper Tools
Flowline/Pipeline Structure Items
Flowline/Pipeline Structure Tools

Subsea Controls System

Tree Controls
Manifold Controls
Topside Controls
Umbilical Termination Assemblies
Subsea Distribution Units
Flying Leeds
Controls System Tools

Services Estimate

Lump Sum

SRTs in Guyana

Reimbursable Estimate

Field Support Services
Offshore Installation, HUC & SU Assist
EPC4 Offshore HUC Support
Guyana Base Facility Fee



Other Costs (Provisional Sums, Allowances, Options

Risers / Flowlines (EPC3 Goods)

Goods Lump Sum Costs

12"/10" Production System (Prod)

- Jumpers
- Flowlines
- ITAs and FLETs
- Risers
- Riser & Flowline seamless line pipe
- Wet Insulation coating

12" Gas Injection System (GI)

- Jumper
- Flowlines
- FLET
- Riser
- Riser & Flowline seamless line pipe

Water Injection System (WI)

- 12" Jumpers
- 16" Flowline
- FLETs
- 12" Risers
- Riser & Flowline seamless line pipe

Early Works Contract

- PMT
- Engineering

Other Costs (Provisional Sums, Allowances, Options)

Flexible Flowlines (EPC4)



Goods Lump Sum Costs

Flexible Risers

Risers

Ancillaries (I-tube extensions, FES bend stiffener connector, bend restrictors etc.)

Subsea Mating Flanges

Buoyancy Modules (Lazy Wave)

Lump Sum Storage (3 Months)

Equipment for Loadout

Sheathing Repair Kits

Other Costs (Provisional Sums, Allowances, Options)

Umbilical - Engr/M&F (PO1)

Lump Sum Costs

Dynamic Umbilicals

Detailed Engineering

Qualification/Verification Testing

Procurement

Fabrication & Construction

Testing (Including equipment)

Spares and Consumables

Infield Static Umbilicals

Detailed Engineering

Qualification/Verification Testing (if applicable)

Procurement

Fabrication & Construction

Testing (Including equipment)

Spares and Consumables

Reel Rental for 20 days (2 off 11.4m reel, 4 off 9.2m reel) mob/demob upon return



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Spreader Bar & Rigging Rental for 20 days (2 off spreader bars, 4 off sets of rigging) and mob/demob upon return

Other Costs (Provisional Sums, Allowances, Options)

Riser Hang-off System - Flexjoints (PO3)

Lump Sum Costs

Other Costs (Provisional Sums, Allowances, Options)

LLI - Large Bore Valves (PO5)

Lump Sum Costs

Other Costs (Provisional Sums, Allowances, Options)

SURF Tieback & Installation Services (EPC3)

Services Lump Sum Costs

12"/10" Production System (Prod)

Jumpers

Flowlines

ITAs and FLETs

Risers

Riser & Flowline seamless line pipe

Wet insulation coating

12" Gas Injection System (GI)

Jumper

Flowlines

FLET

Riser

Riser & Flowline seamless line pipe

Water Injection System (WI)

12" Jumpers

16" Flowline

FLETs

12" Risers



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Riser & Flowline seamless line pipe

Subsea T & I

Manifolds

SDU, UTA

Piles

Flying Leads

Umbilicals

Well Jumpers

Other Costs (Provisional Sums, Allowances, Options)

Logistics

Marine

Aviation

Shorebase & Warehouse Services

Offshore Facilities Fuel

Waste Management Services

Projects (Berth / Hanger)

Digital Infrastructure / Down Hole Fiber Optic

DFHO Interrogators (PO6 - Halliburton)

Fiber Optic Cable (to Liza Ph2 hub) / DHFO Wells Equip/Qual.

DHFO Wells Equipment / Qualification

Digital Strategies Growth Allowance

Owners Cost

PMT

PMT

Non-PMT

3P WO for FPSO

3P WO for SURF



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EM Pre-SU Ops
SSHE 3rd Party
3rd Party Inspection
Vessel Management Team
Third Party Miscellaneous
Affiliate Support / Intercompany
EEPGL allocation
CAR Insurance (SURF only)
Subsea Chemicals - 1st Fills

Project Risk Allowance

Development Drilling Costs



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X2 – OPERATING COST ESTIMATES

Total Operations

Operations

Labour

EM Expat

EM National

SBM Expat

SBM National

Other 3P Contractor

Non-Labour Operating Costs

EM Engineering Support

Materials

Topside & Subsea Chemicals

Chemicals Rental Equipment / Personnel

Insurance

Contingency

Maintenance Repair & Inspection

Labour

EM Expat

EM National

SBM Expat

SBM National

Non-Labour Maintenance Repair & Inspection

EM SURF Maintenance Repair and Inspection

SBM 3P Contracts

Materials

Other Maintenance Repair & Inspection

Contingency



Logistics

- Logistics Operations Expat
- Logistics Operations National
- Marine Support AHTS
- Marine Support MPV
- Marine Supply Vessel PSV
- Marine Supply Vessel PSV
- Marine Fuel
- Helicopter
- Fixed Wing
- Shorebase and Warehouse Ops
- Waste Management
- Other Logistics
- Contingency

Well Work

- Asphaltene / scale remediation
- Well intervention / workovers
- Reservoir data acquisition (PVT, tracer, etc.)
- Contingency

Cost Above Field

Affiliate Technical Support

- Subsurface Ops Team
- Surface Technical Ops Team
- Operations Management
- Non-Operations Management

Global Technical Support

- Maintenance, Reliability, Integrity Support
- Reservoir and Geoscience Support



Affiliate Business Support

Finance

Procurement

Safety and Environmental

EEPGL Corporate Services

Contingency



X2 – OPERATING COST ESTIMATES

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