APPENDIX 1

LUMP SUM PRICE DISTRIBUTION BY MILESTONES AND COMPLETION CRITERIA

**SUMMARY**

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# GENERAL

* 1. This document defines the payment Milestones and the criteria that shall be met by SELLER for the respective payments.
  2. Acronyms' list:
* AIT - Atestado de Inscrição Temporária
* ANVISA – Agência Nacional de Vigilância Sanitária
* ANP – Agência Nacional de Petróleo
* CAE – Computer Aided Engineering
* GDU – Gas Dehydration Unit
* HCDP – Hydrocarbon Dew Point unit
* HSE – Health, Safety, Environmental
* MTO - Material Take Off
* NDT – Non-destructive Test
* NR – Norma Regulamentadora (Brazilian Regulatory Norms from Ministry of Labor and Employment)
* P&ID – Piping & Instrumentation Diagram
* PT – Technical Evaluation Reports
* PO - Purchase Order
* PFP - Passive Fire Protection
* SOP - Operating Systems
* SSOP - Operational Subsystems
* SGSO – ANP´s Operational Safety Management System
* TAP - Performance Acceptance Tests
* TTAS - Accepted System Transfer Terms
* TGs - Turbogenerators

# MEASUREMENT AND PAYMENT PROCEDURE:

* 1. SELLER shall request in writing the Milestone approval to BUYER, as foreseen in article 8 of the Agreement (PAYMENT MILESTONES), presenting the evidences of the conclusion of each Payment Milestone in the Payment Milestones Report. The Report shall inform the date of occurrence of the Milestone, the Agreement financial balance and have attached the supporting documents for the Milestone achievement, as defined in this Exhibit.
     1. BUYER has up to 14 days to evaluate SELLER's request. At the end of the analysis period or sooner, BUYER will inform to SELLER the approval of the Milestone or the pending issues to be solved before payment.

If BUYER delivers to SELLER a notice with pending issues, SELLER shall address all matters to which the notice refers, after which it may deliver a further Milestone request approval, and the foregoing procedure shall be repeated until BUYER accepts the Milestone. The solution of pending items shall be done as per a Remedial Plan that has been approved by BUYER to carry out all measures required to remedy such failure(s), at SELLER's sole cost and expense, and to achieve all of the conditions to complete the Milestone.

If after the conclusion of the Remedial Plan there is any dispute regarding the Milestone completion, the parties will follow the Agreement Dispute Resolution clause (Article 24).

* 1. For the purpose of Milestones approval, any pending issues resulting from the execution of the scope contained in these Milestones shall be approved by BUYER as non-impeditive and duly registered in the Punch List Management System, as defined in Exhibit XVI (COMPUTATIONAL TOOLS AND INTEGRATED MANAGEMENT SYSTEM). SELLER shall keep track of these pending issues with the planned and executed dates.
     1. As a retention, 5% of the Milestone value will be retained and will only be paid after full settlement of the pending issues.
     2. If there are unresolved issues that impact the completion of subsequent Milestones, these ones shall be solved by SELLER before the achievement of the subsequent Milestone. Otherwise, BUYER at its sole discretion, may retain up to 10% of the subsequent Milestone value. The retained value will be paid upon full settlement of the pending issues.

After Agreement Effective Date, the details of the evidence required for approval of the milestones shall be agreed between SELLER and BUYER, based in this document and all related contractual and technical documents. It should be detailed, for example, which reports and functional tests will be evidence to complete each Milestone.

* + 1. All procedures and activities mentioned in this document shall have their execution procedure approved by BUYER.
  1. BUYER, at its sole discretion and upon formal request by SELLER, may authorize, that the payment Milestones related to Procurement (item 5.2), be broken down, allowing a maximum of two payments per Milestone. The absolute percentage of each payment shall be calculated based on the cost(s) of the equipment related to the payment.

# DEFINITIONS

* 1. For the Topsides Milestones approval, the following definition of “Module Completion” shall be followed:

1. Completion of the structure and outfittings assembled according to the last revision of the project design documentation with “released for construction” status (including but not limited to handrail, stairs, equipment support/base, piping supports, gutters, floor grids and PFP) including non-destructive tests - and painting. Activities according to Exhibit IV (Directives for Product Fabrication) and execution procedure approved by BUYER;
2. Piping: Completion of the piping folders/records approved (excluding hook-up and integration scope) comprising lines assembly and their respective definitive piping supports, thermal insulation/PFP/ valves installation, hydrostatic and leak tests carried out and lines’ cleaning and preservation. Activities according to Exhibit IV (Directives for Product Fabrication) and execution procedure approved by BUYER; for lines’ cleaning and preservation, the requirements of Exhibit VIII (Directives for Commissioning) shall also be followed;
3. Electrical, instrumentation and automation (excluding hook-up and integration scope): Completion of the electrical, automation and instrumentation cables laid, attached, connected and with their respective continuity/insulation tests performed; completion of the tubings assembled and tested; instruments calibrated in accordance with item 5.21.1.16 of I-MD-3010.2D-1200-970-P4X-001 – COMMISSIONING DESCRIPTIVE MEMORANDUM and installed. Activities according to Exhibit IV (Directives for Product Fabrication) and execution procedure approved by BUYER;
4. Equipment: Equipment installed (static and dynamic mechanical equipment and electrical equipment). Activities according to Exhibit IV (Directives for Product Fabrication) and execution procedure approved by BUYER;
5. Painting: Completion of the module painting (structure, outfittings and piping) in its final coat, including thermal insulation and/or passive fire protection (PFP), where applicable. Activities according to Exhibit IV (Directives for Product Fabrication) and execution procedure approved by BUYER;
6. Quality: the issuance of quality reports/records showing the conformity / traceability of the applied materials and approved tests. Activities in accordance with Exhibit VII (Directives for Quality Assurance System) and execution procedure approved by BUYER;
7. Preservation: all modules shall be preserved based on a preservation plan presented by SELLER. Such plan shall be followed by SELLER from module construction and assembly up to Handover Milestone, according to Exhibit IV (Directives for Product Fabrication) and Exhibit VIII (Directives for Commissioning).

NOTE 1: After BUYER analysis and approval, pending items can be treated as a punch list and remedied after measuring the Milestone according to the provisions under item 2.2.

NOTE 2: Each discipline mentioned above shall have an execution procedure approved by BUYER, where it should be detailed the completion requirements and approval criteria.

NOTE 3: Requirements for leak tests are defined in the document Exhibit VIII (Directives for Commissioning) and I-ET-3010.00-1200-200-P4X-115 - REQUIREMENTS FOR PIPING FABRICATION AND COMMISSIONING.

NOTE 4: In the event that it is not possible to achieve the completion defined in item 3.1, due to technical limitation or interference, risk of damage and rework caused by the Module lifting condition, SELLER shall, for each individual Module, submit for the approval of BUYER, a documented account explaining the reasons why completion could not be achieved and providing criteria allowing the assessment of the degree to which a Module has been completed.

* 1. Only as Milestones’ approval criteria, the following definition of “Commissioned Systems” is applicable: execution and signature of the Performance Acceptance Tests (TAP-1) and the Accepted System Transfer Terms (TTAS-1) by BUYER, SELLER and Classification Society (if applicable), in accordance with the commissioning procedure approved by BUYER and complying with Exhibit VIII - Directives for Commissioning.
     1. The Basic Engineering Design provided by BUYER divides the project into Operating Systems (SOP). During detailed engineering design phase, SELLER shall breakdown the SOPs into Operational Subsystems (SSOP), in accordance with Exhibit VIII - Directives for Commissioning.

3.2.1.1 After Breaking down the SOPs into SSOPs, for Milestones from 5.6.1 to 5.6.8, BUYER and SELLER shall plan the ramp-up and define the SSOPs applicable to the respective Milestones.

* + 1. During the preparation of the TAP procedures, SELLER shall identify the SSOPs required for the tests.
    2. The execution of all Performance Acceptance Tests (TAP) shall be carried out following the precedence network and with definitive systems, in accordance with the commissioning procedure approved by BUYER and in compliance with Exhibit VIII - Directives for Commissioning.
    3. The wording “impeditive/non-impeditive pending” will be used in the Integration and Acceptance phase and the definition shall be in accordance with the Exhibit VIII - Directives for Commissioning.
    4. Maintenance: all modules/Hull shall be maintained based on a maintenance plan presented by SELLER. Such plan shall be followed by SELLER from module/Hull construction and assembly up to Handover Milestone, in accordance with Exhibit IV - Directives for Product Fabrication and Exhibit VIII - Directives for Commissioning.

# PAYMENT MILESTONES

* 1. The payment Milestones, in the case SELLER provides the Advance Payment Security in accordance with Section 5.2 of the Agreement, are listed below with respective absolute financial weight, regarding the Lump Sum Price value (Price Schedule A). The detailed description of each Milestone is on item 5 of this document, as noticed in the first column of the table below:

|  |  |  |
| --- | --- | --- |
| Item | Milestone | % Absolut |
| 5.1 | Engineering | 6.57% |
| 5.1.1 | Final submission of the Endorsement report | 0.35% |
| 5.1.2 | Design Review and delivery of the CAE tool databases (30%) – Hull | 0.23% |
| 5.1.3 | Design Review and delivery of the CAE tool databases (30%) - Topsides | 0.22% |
| 5.1.4 | Submission Risk and Safety Studies | 0.81% |
| 5.1.5 | Hull Global and Fatigue Analysis | 0.18% |
| 5.1.6 | Submission of the Pipe Stress Analysis (40%) and related isometrics | 0.76% |
| 5.1.7 | Submission of the Pipe Stress Analysis (100%) and related isometrics | 0,50% |
| 5.1.8 | Submission of Approved for Construction P&IDs - Group 1 | 0.63% |
| 5.1.9 | Submission of Approved for Construction P&IDs | 0.27% |
| 5.1.10 | Submission of the Detailed Engineering Analysis and Reports | 0.54% |
| 5.1.11 | Design Review and delivery of the CAE tool databases (60%) - Hull | 0.45% |
| 5.1.12 | Design Review and delivery of the CAE tool databases (60%) - Topsides | 0.45% |
| 5.1.13 | Design Review and delivery of the CAE tool databases (90%) - Hull | 0.45% |
| 5.1.14 | Design Review and delivery of the CAE tool databases (90%) - Topsides | 0.45% |
| 5.1.15 | Submission of the Spare Parts list for 2 years | 0.10% |
| 5.1.16 | Issuance and acceptance of 100% of the as-built drawings | 0.18% |
| 5.2 | Acquisitions | 27.00% |
| 5.2.1 | Purchase Order (PO) of the Main Power Generators packages | 0.99% |
| 5.2.2 | Receipt of Electric Generators and start of Main Equipment installation on skid of Main Power Generators packages | 2.34% |
| 5.2.3 | Delivery of Main Power Generators | 3.51% |
| 5.2.4 | Purchase Order (PO) for Gas Compressors packages | 1.53% |
| 5.2.5 | Receipt of Electric Motor and HVSD for Gas Compressors packages (Main, Export, CO2 and VRU Services) | 1.08% |
| 5.2.6 | Delivery of Gas Compressors packages (Main, Export, CO2 and VRU Services) | 1.62% |
| 5.2.7 | Receipt of Electric Motor and HVSD for Injection Gas Compressors packages | 0.94% |
| 5.2.8 | Delivery of Gas Injection Compressors package | 1.40% |
| 5.2.9 | Purchase Order (PO) for Seawater Suction, Treatment and Reservoir’s Water Injection Pumps | 0.45% |
| 5.2.10 | Delivery of Seawater Suction, Treatment and Reservoir’s Water Injection Pumps | 1.80% |
| 5.2.11 | Purchase Order (PO) for Oil Separators and Electrostatic Treaters | 0.72% |
| 5.2.12 | Delivery of Oil Separators and Electrostatic Treaters | 1.80% |
| 5.2.13 | Purchase Order (PO) for CO2 Removal Unit | 0.36% |
| 5.2.14 | Delivery of CO2 Removal Unit | 0.90% |
| 5.2.15 | Purchase Order (PO) for Hull Auxiliary and Emergency Power Generators and Hull Fire Fighting Pumps | 0.72% |
| 5.2.16 | Receipt of Diesel Engine and Hydraulic Power Pack for Hull Auxiliary and Emergency Power Generators and Hull Fire Fighting Pumps | 1.44% |
| 5.2.17 | Delivery of Hull Auxiliary and Emergency Power Generators and Hull Fire Fighting Pumps | 2.16% |
| 5.2.18 | Purchase Order (PO) for Hull Engine Room equipment | 0.54% |
| 5.2.19 | Delivery of Hull critical equipment | 2.34% |
| 5.2.20 | Purchase Order (PO) of Unit's Mooring, Fixed Boom Cranes and Pull-in Systems | 0.36% |
| 5.3 | Hull Fabrication | 19.44% |
| 5.3.1 | Delivery of the Hull steel material 40% | 1,00% |
| 5.3.2 | Strike Steel | 1,70% |
| 5.3.3 | Keel Laying | 5.94% |
| 5.3.4 | Installation of hull engine room equipment | 1,00% |
| 5.3.5 | Installation of Hull firefighting pumps | 1,70% |
| 5.3.6 | Blocks erection - 50% | 1.35% |
| 5.3.7 | Load Test of Auxiliary and Emergency Generators | 1.08% |
| 5.3.8 | Performance acceptance tests (TAP-1) of critical hull SOPs | 1.08% |
| 5.3.9 | Hull Float Off | 1.89% |
| 5.3.10 | Hull Substantial Completion | 2.70% |
| 5.4 | Topside | 22.14% |
| 5.4.1 | Delivery of structure steel material 40% | 0.70% |
| 5.4.2 | Finish “pancake” fabrication for Power Generation Module(s) | 1,65% |
| 5.4.3 | Finish “pancake” fabrication forCompression Module(s) | 1.79% |
| 5.4.4 | Finish “pancake” fabrication for Utilities Module(s) | 0.53% |
| 5.4.5 | Finish “pancake” fabrication for Electric/Automation Module(s) | 1.00% |
| 5.4.6 | Finish “pancake” fabrication for the Pig Lauchers/Receivers, Oil Processing and Produced Water Treatment Modules | 0.75% |
| 5.4.7 | Finish “pancake” fabrication for the CO2 Removal and Gas Dehydration Modules | 0.75% |
| 5.4.8 | Finish “pancake” fabrication for the Flare System, Water Injection and Chemical Unit Modules | 0.75% |
| 5.4.9 | Power Generation Modules Fabrication (50%) | 0.90% |
| 5.4.10 | Power Generation Modules Completion | 1.35% |
| 5.4.11 | Compression Modules Fabrication (50%) | 1.08% |
| 5.4.12 | Compression Modules Completion | 1.62% |
| 5.4.13 | Oil Treatment Modules Completion | 1.24% |
| 5.4.14 | Gas Treatment Modules Completion | 1.24% |
| 5.4.15 | Utilities and Electric/Automation Module(s) Completion | 0.90% |
| 5.4.16 | Other Unit Modules Completion | 2.38% |
| 5.4.17 | Lifting of the First Topsides Modules | 0.99% |
| 5.4.18 | Lifting of the last Topsides Modules | 0.27% |
| 5.4.19 | Start of Topside Spool Fabrication | 0.90% |
| 5.4.20 | Delivery of Exotic Material Piping | 1.35% |
| 5.5 | Integration | 8.73% |
| 5.5.1 | FPSO Power Generation System Full Load Test | 0.90% |
| 5.5.2 | Completion of Piping Hook-up Assembly | 1.08% |
| 5.5.3 | Critical Topsides sub-systems commissioned | 2.52% |
| 5.5.4 | Habitability | 0.45% |
| 5.5.5 | Gas Compression and Treatment System testing | 1.08% |
| 5.5.6 | Substantial Completion | 1.20% |
| 5.5.7 | Unit Handover | 1.50% |
| 5.6 | Acceptance | 6.12% |
| 5.6.1 | First Oil Production | 1.20% |
| 5.6.2 | First Oil TAP2 | 0.51% |
| 5.6.3 | Gas Compression, Injection and Offloading | 1.51% |
| 5.6.4 | Gas Compression, Injection and Offloading TAP-2 | 0.65% |
| 5.6.5 | Water treatment and injection | 0.31% |
| 5.6.6 | Water treatment and injection TAP-2 | 0.14% |
| 5.6.7 | Gas treatment (CO2), Export and gas lift | 0.28% |
| 5.6.8 | Gas treatment (CO2), Export and gas lift TAP-2 | 0.12% |
| 5.6.9 | Unit Final Completion | 0.90% |
| 5.6.10 | Unit Final Acceptance | 0.50% |
| 5.7 | Advance | 10,00% |
| 5.7.1 | Advance Payment | 10.00% |

* 1. The payment Milestones, in the case SELLER does not present the Advance Payment Security in accordance with Section 5.2.1 of the Agreement, are listed below with respective absolute financial weight, regarding the Lump Sum Price value (Price Schedule A). The detailed description of each Milestone is on item 5 of this document, as noticed in the first column of the table below:

|  |  |  |
| --- | --- | --- |
| Item | Milestone | % Absolut |
| 5.1 | Engineering | 7.30% |
| 5.1.1 | Final submission of the Endorsement report | 0.39% |
| 5.1.2 | Design Review and delivery of the CAE tool databases (30%) – Hull | 0.26% |
| 5.1.3 | Design Review and delivery of the CAE tool databases (30%) - Topsides | 0.24% |
| 5.1.4 | Submission Risk and Safety Studies | 0.90% |
| 5.1.5 | Hull Global and Fatigue Analysis | 0.20% |
| 5.1.6 | Submission of the Pipe Stress Analysis (40%) and related isometrics | 0.84% |
| 5.1.7 | Submission of the Pipe Stress Analysis (100%) and related isometrics | 0.56% |
| 5.1.8 | Submission of Approved for Construction P&IDs - Group 1 | 0.70% |
| 5.1.9 | Submission of Approved for Construction P&IDs | 0.30% |
| 5.1.10 | Submission of the Detailed Engineering Analysis and Reports | 0.60% |
| 5.1.11 | Design Review and delivery of the CAE tool databases (60%) - Hull | 0.50% |
| 5.1.12 | Design Review and delivery of the CAE tool databases (60%) - Topsides | 0.50% |
| 5.1.13 | Design Review and delivery of the CAE tool databases (90%) - Hull | 0.50% |
| 5.1.14 | Design Review and delivery of the CAE tool databases (90%) - Topsides | 0.50% |
| 5.1.15 | Submission of the Spare Parts list for 2 years | 0.11% |
| 5.1.16 | Issuance and acceptance of 100% of the as-built drawings | 0.20% |
| 5.2 | Acquisitions | 30.00% |
| 5.2.1 | Purchase Order (PO) of the Main Power Generators packages | 1.10% |
| 5.2.2 | Receipt of Electric Generators and start of Main Equipment installation on skid of Main Power Generators packages | 2.60% |
| 5.2.3 | Delivery of Main Power Generators | 3.90% |
| 5.2.4 | Purchase Order (PO) for Gas Compressors packages | 1.70% |
| 5.2.5 | Receipt of Electric Motor and HVSD for Gas Compressors packages (Main, Export, CO2 and VRU Services) | 1.20% |
| 5.2.6 | Delivery of Gas Compressors packages (Main, Export, CO2 and VRU Services) | 1.80% |
| 5.2.7 | Receipt of Electric Motor and HVSD for Injection Gas Compressors packages | 1.04% |
| 5.2.8 | Delivery of Gas Injection Compressors packages | 1.56% |
| 5.2.9 | Purchase Order (PO) for Seawater Suction, Treatment and Reservoir’s Water Injection Pumps | 0.50% |
| 5.2.10 | Delivery of Seawater Suction, Treatment and Reservoir’s Water Injection Pumps | 2.00% |
| 5.2.11 | Purchase Order (PO) for Oil Separators and Electrostatic Treaters | 0.80% |
| 5.2.12 | Delivery of Oil Separators and Electrostatic Treaters | 2.00% |
| 5.2.13 | Purchase Order (PO) for CO2 Removal Unit | 0.40% |
| 5.2.14 | Delivery of CO2 Removal Unit | 1.00% |
| 5.2.15 | Purchase Order (PO) for Hull Auxiliary and Emergency Power Generators and Hull Fire Fighting Pumps | 0.80% |
| 5.2.16 | Receipt of Diesel Engine and Hydraulic Power Pack for Hull Auxiliary and Emergency Power Generators and Hull Fire Fighting Pumps | 1.60% |
| 5.2.17 | Delivery of Hull Auxiliary and Emergency Power Generators and Hull Fire Fighting Pumps | 2.40% |
| 5.2.18 | Purchase Order (PO) for Hull Engine Room equipment | 0.60% |
| 5.2.19 | Delivery of Hull critical equipment | 2.60% |
| 5.2.20 | Purchase Order (PO) of Unit's Mooring, Fixed Boom Cranes and Pull-in Systems | 0.40% |
| 5.3 | Hull Fabrication | 21.60% |
| 5.3.1 | Delivery of the Hull steel material 40% | 1,10% |
| 5.3.2 | Strike Steel | 1,90% |
| 5.3.3 | Keel Laying | 6.60% |
| 5.3.4 | Installation of hull engine room equipment | 1,10% |
| 5.3.5 | Installation of Hull firefighting pumps | 1,90% |
| 5.3.6 | Blocks erection 50% | 1.50% |
| 5.3.7 | Load Test of Auxiliary and Emergency Generators | 1.20% |
| 5.3.8 | Performance acceptance tests (TAP-1) of critical hull SOPs | 1.20% |
| 5.3.9 | Hull Float Off | 2.10% |
| 5.3.10 | Hull Substantial Completion | 3.00% |
| 5.4 | Topside | 24.60% |
| 5.4.1 | Delivery of structure steel material 40% | 0.78% |
| 5.4.2 | Finish “pancake” fabrication for Power Generation Module(s) | 1,83% |
| 5.4.3 | Finish “pancake” fabrication forCompression Module(s) | 1.99% |
| 5.4.4 | Finish “pancake” fabrication for Utilities Module(s) | 0.59% |
| 5.4.5 | Finish “pancake” fabrication for Electric/Automation Module(s) | 1.11% |
| 5.4.6 | Finish “pancake” fabrication for the Pig Lauchers/Receivers, Oil Processing and Produced Water Treatment Modules | 0.83% |
| 5.4.7 | Finish “pancake” fabrication for the CO2 Removal and Gas Dehydration Modules | 0.83% |
| 5.4.8 | Finish “pancake” fabrication for the Flare System, Water Injection and Chemical Unit Modules | 0.83% |
| 5.4.9 | Power Generation Modules Fabrication (50%) | 1.00% |
| 5.4.10 | Power Generation Modules Completion | 1.50% |
| 5.4.11 | Compression Modules Fabrication (50%) | 1.20% |
| 5.4.12 | Compression Modules Completion | 1.80% |
| 5.4.13 | Oil Treatment Modules Completion | 1.38% |
| 5.4.14 | Gas Treatment Modules Completion | 1.38% |
| 5.4.15 | Utilities and Electric/Automation Module(s) Completion | 1.00% |
| 5.4.16 | Other Unit Modules Completion | 2.65% |
| 5.4.17 | Lifting of the First Topsides Modules | 1.10% |
| 5.4.18 | Lifting of the last Topsides Modules | 0.30% |
| 5.4.19 | Start of Topside Spool Fabrication | 1.00% |
| 5.4.20 | Delivery of Exotic Material Piping | 1.50% |
| 5.5 | Integration | 9.70% |
| 5.5.1 | FPSO Power Generation System Full Load Test | 1.00% |
| 5.5.2 | Completion of Piping Hook-up Assembly | 1.20% |
| 5.5.3 | Critical Topsides sub-systems commissioned | 2.80% |
| 5.5.4 | Habitability | 0.50% |
| 5.5.5 | Gas Compression and Treatment System testing | 1.20% |
| 5.6.6 | Substantial Completion | 1.33% |
| 5.6.7 | Unit Handover | 1.67% |
| 5.6 | Acceptance | 6.80% |
| 5.6.1 | First Oil Production | 1.33% |
| 5.6.2 | First Oil TAP2 | 0.57% |
| 5.6.3 | Gas Compression, Injection and Offloading | 1.68% |
| 5.6.4 | Gas Compression, Injection and Offloading TAP-2 | 0.72% |
| 5.6.5 | Water treatment and injection | 0.35% |
| 5.6.6 | Water treatment and injection TAP-2 | 0.15% |
| 5.6.7 | Gas treatment (CO2), Export and gas lift | 0.31% |
| 5.6.8 | Gas treatment (CO2), Export and gas lift TAP-2 | 0.13% |
| 5.6.9 | Unit Final Completion | 1.06% |
| 5.6.10 | Unit Final Acceptance | 0.50% |

# ACCEPTANCE CRITERIA FOR MILESTONES PAYMENT

* 1. **Engineering**
     1. Final submission of the Endorsement report, approved by BUYER and issuance of letter in which SELLER declare full endorsement of the Basic Engineering Design, without limitation.
     2. Design Review and delivery of the CAE tool databases (30%) - Hull:
     3. Approval by BUYER of the 30% Design Review of the hull in accordance with the requirements defined in I-ET-3000.00-0000-940-P4X-003;
     4. Issuance of the CAE tools databases of the hull in accordance with the 30% maturity defined in I-ET-3000.00-1350-94P-P4X-002 and compliance with BUYER´s comments.
     5. Design Review and delivery of the CAE tool databases (30%) - Topsides:
     6. Approval by BUYER of the 30% Design Review of the Topsides in accordance with the requirements defined in I-ET-3000.00-0000-940-P4X-003;
     7. Issuance of the CAE tools databases of the Topsides in accordance with the 30% maturity defined in I-ET-3000.00-1350-94P-P4X-002 and compliance with BUYER´s comments.
     8. Submission Risk and Safety Studies – issuance of the below studies/analysis, in compliance with BUYER’s comments, and approved by Classification Society (in the applicable studies/analysis). The studies shall be prepared in accordance with the requirements of the referenced technical specifications. The preparation of the studies shall comply with the Project Change Management (I-ET-3000.00-5400-947-P4X-001):
     9. Fire Propagation and Smoke Dispersion Study (I-ET-3000.00-5400-98G-P4X-003);
     10. Explosion Study (I-ET-3000.00-5400-98G-P4X-001);
     11. Gas Dispersion Study (I-ET-3000.00-5400-98G-P4X-002);
     12. Dropped Objects and Swinging Loads Study (I-ET-3000.00-1300-98A-P4X-003);
     13. Ship Collision Study (I-ET-3000.00-1300-98A-P4X-002);
     14. Hazard and Operability Study - HAZOP (I-ET-3000.00-5400-98X-P4X-001);
     15. Escape, Evacuation and Rescue Analysis (I-ET-3000.00-5430-947-P4X-001);
     16. Noise and Vibration Study (I-ET-3000.00-1200-98A-P4X-001);
     17. Flare Radiation and Dispersion Study (I-ET-3000.00-5400-98G-P4X-004);
     18. CO2 High Content Gas Leakage - Embrittlement Study (I-ET-3000.00-5400-98G-P4X-005);
     19. Risk Assessment (I-ET-3000.00-5400-947-P4X-004).
     20. Hull Global and Fatigue Analysis – document issuance, in compliance with BUYER’s comments and approved by the Classification Society. The scope of each study shall comply with Technical Specification I-ET-3010.2E-1351-140-P4X-001.
     21. Submission of the Pipe Stress Analysis (40%) and related isometrics - issuance of documentation related to 40% of the topsides piping weight, with “Approved for Construction” status including BUYER’s comments and approval.

1. Topsides piping weight (%): [Weight contained in the Material Requests (or similar document) issued by SELLER]/(total weight of the piping discipline contained in SELLER's Weight Control Report);
2. The Pipe Stress Analysis shall follow the requirements of I-ET-3010.2D-1200-200-P4X-006 and I-ET-3010.2E-1200-200-P4X-006 and issued with “Approved for Construction” status;
3. The 3 groups of documents (Weight Control Report, Material Requests and Pipe Stress Analysis) shall contain the same lines and be consistent among each other;
4. In the cases where the issuance of Pipe Stress Analysis is not applicable, in accordance with I-ET-3010.2D-1200-200-P4X-006 and I-ET-3010.2E-1200-200-P4X-006, SELLER shall only issue isometrics with “Approved for Construction” status. If the approval of BUYER is not required by I-ET-3010.2D-1200-200-P4X-006 requirements, the SELLER's approval will be considered as evidence.
   * 1. Submission of the Pipe Stress Analysis (100%) and related isometrics - issuance of documentation related to 100% of the topsides piping weight, with “Approved for Construction” status including BUYER´s comments and approval
5. Topsides piping weight (%): [Weight contained in the Material Requests (or similar document) issued by SELLER] / (total weight of the piping discipline contained in SELLER's Weight Control Report);
6. The Pipe Stress Analysis shall follow the requirements of I-ET-3010.2D-1200-200-P4X-006 and I-ET-3010.2E-1200-200-P4X-006 and issued with “Approved for Construction” status;
7. The 3 groups of documents (Weight Control Report, Material Requests and Pipe Stress Analysis) shall contain the same lines and be consistent among each other;
8. In the cases where the issuance of Pipe Stress Analysis is not applicable, in accordance with I-ET-3010.2D-1200-200-P4X-006 and I-ET-3010.2E-1200-200-P4X-006, SELLER shall only issue isometrics with “Approved for Construction” status. If the approval of BUYER is not required by I-ET-3010.2D-1200-200-P4X-006 requirements, the SELLER's approval will be considered as evidence.
   * 1. Submission of Approved for Construction P&IDs - Group 1 – Documents' issuance with “Approved for Construction” status, in compliance with BUYER’s comments and approved by Classification Society. The recommendations of the safety/HSE studies shall be implemented and approved by the Classification Society. P&IDs shall be prepared in accordance with the requirements defined in Exhibit III.

* **Group 1: TOPSIDE Systems**: Production/Elevation; Oil Processing; Gas Processing; Gas Injection; Water Treatment/Injection; Compression Systems; Fuel gas; Relief/depressurization and flare; Cooling water; Electric Generation; Heating water.
* **Group 1: HULL Systems**: Cargo system; Offloading system; Inert Gas Generation System; Ballast System; Air Compression; Auxiliary Generation; Emergency Generation.
  + 1. Submission of Approved for Construction P&IDs – Issuance of the Final P&IDs, of the remaining systems in addition of the Group 1 systems in item 5.1.8, with “Approved for Construction” status, in compliance with BUYER’s comments and approved by Classification Society. The recommendations of the safety/HSE studies shall be implemented and approved by the Classification Society. P&IDs shall be prepared in accordance with the requirements defined in Exhibit III.
    2. Submission of the Detailed Engineering Analysis and Reports: Issuance of the following detailed engineering documents including the respective BUYER’s comments:
    3. Operation, Lifting, Blast and Fatigue analysis; (Structural analysis of the topside modules, Pipe Rack, Flare Tower, Riser Balcony, URB, LRB, Helideck and respective foundations), in compliance with the approved Hull Global Deflection Report, in accordance with the I-ET-3010.00-1351-140-P4X-001;
    4. Cause and Effect Matrix: in accordance with the I-ET-3010.00-1200-800-P4X-012. The document shall be issued after the Hazop of the detailed design and shall comply with all HAZOP’s findings/required reviews;
    5. Relief and Depressurization Study, in accordance with the requirements defined in the Exhibit III;
    6. Intermediate Crane and Mechanical Handling study, in accordance with the requirements defined in I-ET-3010.2D-5266-630-P4X-001 and I-ET-3010.2E-5266-630-P4X-002;
    7. Intermediate Electrical System Studies, in accordance with the requirements defined in I-ET-3010.00-5140-700-P4X-006;
    8. Instrumentation and Automation Architecture, the document shall be issued after approval of the Technical Evaluation Reports (PTs) of all units/packages defined on item 7;
    9. Process Dynamic Simulation for Evaluation for compressors, in accordance with the requirements defined in Exhibit III;
    10. Settle-out Pressure Study, in accordance with the requirements defined in Exhibit III.
    11. Design Review and delivery of the CAE tool databases (60%) – Hull:
    12. Approval by BUYER of the 60% Design Review of the hull in accordance with the requirements defined in I-ET-3000.00-0000-940-P4X-003;
    13. Issuance of the CAE tools databases of the hull in accordance with the 60% maturity defined in I-ET-3000.00-1350-94P-P4X-002 and compliance with BUYER´s comments;
    14. Design Review and delivery of the CAE tool databases (60%) - Topsides:
    15. Approval by BUYER of the 60% Design Review of the Topsides in accordance with the requirements defined in I-ET-3000.00-0000-940-P4X-003;
    16. Issuance of the CAE tools databases of the topsides in accordance with the 60% maturity defined in I-ET-3000.00-1350-94P-P4X-002 and compliance with BUYER´s comments;
    17. Design Review and delivery of the CAE tool databases (90%) – Hull:
    18. Approval by BUYER of the 90% Design Review of the Hull in accordance with the requirements defined in I-ET-3000.00-0000-940-P4X-003;
    19. Issuance of the CAE tools databases of the Hull in accordance with the 90% maturity defined in I-ET-3000.00-1350-94P-P4X-002 and compliance with BUYER´s comments.

* + 1. Design Review and delivery of the CAE tool databases (90%) - Topsides:
    2. Approval by BUYER of the 90% Design Review of the Topsides in accordance with the requirements defined in I-ET-3000.00-0000-940-P4X-003;
    3. Issuance of the CAE tools databases of the Topsides in accordance with the 90% maturity defined in I-ET-3000.00-1350-94P-P4X-002 and compliance with BUYER´s comments.
    4. Submission of the Spare Parts list for 2 years - Submission of the Spare parts list for 2 years of operation as per Exhibit VIII - Directives for Commissioning and Exhibit V - DIRECTIVES FOR ACQUISITIONS, including the respective BUYER’s comments.
    5. Issuance and acceptance of 100% of the as-built drawings:
    6. All documents, including detailed design documents, manuals, data-books, Classification Society approved documents and all documents issued by Vendors;
    7. 3D model and databases.
  1. **Acquisitions**
     1. Purchase Order (PO) of the Main Power Generators packages - issuance to BUYER of the purchase order(s), without monetary value, signed by SELLER and equipment supplier, whose scope of supply shall be in accordance with the respective material and/or related technical specification (TAG TG-5147001A/F). The PO shall include the pre-operation and start-up spare parts, fully complying with Exhibit V - DIRECTIVES FOR ACQUISITIONS.
     2. Receipt of Electric Generators and start of Main Equipment installation on skid of Main Power Generators packages – Issuance to BUYER of a receiving report with photographic and other pertinent evidence attesting the receipt of all Electric Generator at Main Power Generator Packager facilities and issuance to BUYER of a report with photographic and other pertinent evidence attesting that assembly of Main Equipment (Electric Generator or Gearbox or Power Turbine or Gas Generator) on skid has started for all Main Power Generators packages.
     3. Delivery of Main Power Generators - Issuance to BUYER of the Factory Acceptance Test Reports approved by SELLER and classification society. See TAGs on item 5.2.1. Equipment, in the totality of the purchase order (s), delivered on module assembly site, delivery inspection reports issued by SELLER´s quality control group, indicating supply/transportation pending issues.
     4. Purchase Order (PO) for Gas Compressors packages (TAGs UC-1231001A/B/C, UC-1231002A/B/C/D, UC-1225001A/B, UC-1254001A/B/C, UC-1252001A/B/C) - Issuance to BUYER of the purchase order (s), without monetary value, signed by SELLER and equipment supplier, defined in the contractual Vendor List, whose scope of supply shall be in accordance with the respective material requisition and/or related technical specification. The PO shall include pre-operation and start-up spare parts, fully complying with Exhibit V - DIRECTIVES FOR ACQUISITIONS.
     5. Receipt of Electric Motor and HVSD for Gas Compressors packages (Main, Export, CO2 and VRU Services) – Issuance to BUYER of a receiving inspection report with photographic and other pertinent evidence attesting the receipt of Electric Motor for Gas Compressors packages (TAGs UC-1231001A/B/C, UC-1231002A/B/C/D, UC-1254001A/B/C, UC-1225001A/B) and the receipt of all Hydraulic Variable Speed Drive (HVSD) for Gas Compressors packages (TAGs UC-1231001A/B/C, UC-1231002A/B/C/D, UC-1254001A/B/C) at Gas Compressor Packager facilities.
     6. Delivery of Gas Compressors packages - Main, Export, CO2 and VRU Services - (TAGs UC-1231001A/B/C, UC-1231002A/B/C/D, UC-1225001A/B, UC-1254001A/B/C) - Issuance to BUYER of the Factory Acceptance Test Reports approved by SELLER and the classification society, if applicable. Equipment, in the totality of the purchase order(s), delivered on module assembly site, delivery inspection reports issued by SELLER´s quality control group, indicating the supply/transportation pending issues.
     7. Receipt of Electric Motor and HVSD for Injection Gas Compressors packages – Issuance to BUYER of a receiving inspection report with photographic and other pertinent evidence attesting evidencing the receipt of Electric Motor for Injection Gas Compressors packages (TAGs UC-1252001A/B) and the receipt of all Hydraulic Variable Speed Drive (HVSD) for Gas Compressors packages (TAGs UC-1252001A/B) at Injection Gas Compressor Packager facilities.
     8. Delivery of Gas Injection Compressors package (UC-1252001A/B) - Issuance to BUYER of the Factory Acceptance Test Reports approved by SELLER and the classification society, if applicable. Equipment, in the totality of the purchase order(s), delivered on module assembly site, delivery inspection reports issued by SELLER’s quality control group, indicating the supply/transportation pending issues.
     9. Purchase Order (PO) for Sea Water Lift Pumps, Water Treatment Unit and Water Injection Pumps (TAGs B-5111001A/B/C/D/E/F, UT-1251002, B-1251001A/B/C, B-1251002A/B/C, B-5331001A/B)- Issuance to BUYER of the PO(s), without monetary value, signed (s) by SELLER and equipment supplier, defined in the contractual Vendor List, whose scope of supply shall be in accordance with the respective material requisition and/or related technical specification. The PO(s) shall include pre-operation and start-up spare parts, fully complying with Exhibit V - DIRECTIVES FOR ACQUISITIONS.
     10. Delivery of Sea Water Lift, Water Treatment and Water Injection Pumps (see TAGs on above item) - Issuance to BUYER of the Factory Acceptance Test Reports approved by SELLER and classification society, if applicable. Equipment, in the totality of the purchase order (s), delivered on Modules/Hull assembly site, delivery inspection reports issued by SELLER’s quality control group, indicating supply/transportation pending issues.
     11. Purchase Order (PO) for Oil Separators and Electrostatic Treaters (TAGs TO-1223001A/B, TO-1223002 A/B, V-TO-1223001 A/B, V-TO-1223002 A/B, SG-1223001A/B, SG-1223002) – issuance to BUYER of the purchase order(s), without monetary value, signed by SELLER and equipment supplier(s), whose scope of supply shall be in accordance with the respective material requisition and/or related technical specification. The PO(s) shall include the pre-operation and start-up spare parts, fully complying with Exhibit V - DIRECTIVES FOR ACQUISITIONS.
     12. Delivery of Oil Separators and Electrostatic Treaters (see TAGs on above item) - Issuance to BUYER of the Factory Acceptance Test Reports approved by SELLER and classification society, if applicable. Equipment, in the totality of the purchase order(s), delivered on module assembly site, delivery inspection reports issued by SELLER’s quality control group, indicating supply/transportation pending issues.
     13. Purchase Order (PO) for CO2 Removal Unit (TAGs UT-1235001) - issuance to BUYER of the purchase order(s), without monetary value, signed(s) by SELLER and equipment supplier, defined in contractual Vendor List, whose scope of supply shall be in accordance with the respective material requisition and/or related technical specification. The PO(s) shall include pre-operation and start-up spare parts, fully complying with Exhibit V - DIRECTIVES FOR ACQUISITIONS.

Delivery of CO2 Removal Unit (see TAGs on above item) - issuance to BUYER of the Factory Acceptance Test Reports approved by SELLER and classification society, if applicable. Equipment, in the totality of the purchase order(s), delivered on module assembly site, delivery inspection reports issued by SELLER’s quality control group, indicating supply/transportation pending issues.

* + 1. Purchase Order (PO) for Hull Auxiliary and Emergency Power Generators and Hull Fire Fighting Pumps (TAGs UG-5261501, UG-5262501, UG-5262502, UB-5420501A/B/C/D, B-5420502A/B) - issuance to BUYER of the purchase order(s), without monetary value, signed(s) by SELLER and the equipment supplier, defined in the contractual Vendor List, whose scope of supply shall be in accordance with the respective material requisition and/or related technical specification. The PO(s) shall include pre-operation and start-up spare parts, fully complying with Exhibit V - DIRECTIVES FOR ACQUISITIONS.
    2. Receipt of Diesel Engine and Hydraulic Power Pack for Hull Auxiliary and Emergency Power Generators and Hull Fire Fighting Pumps – Issuance to BUYER of a receiving inspection report with photographic and other pertinent evidence attesting the receipt of all Diesel Engines for Hull Auxiliary and Emergency Power Generators and Hull Fire Fighting Pumps (TAGs UG-5261501, UG-5262501, UG-5262502, UB-5420501A/B/C/D) at Packager facilities and issuance to BUYER of a report with photographic and other pertinent evidence attesting the receipt of Hydraulic Power Pack for Hull Fire Fighting Pumps (TAGs UB-5420501A/B/C/D) at Packager facilities.

Delivery of Hull Auxiliary and Emergency Power Generators and Hull Fire Fighting Pumps (see TAGs on above item) - issuance to BUYER of the Factory Acceptance Test Reports approved by SELLER and classification society, if applicable. Equipment, in the totality of the purchase order(s), delivered on hull construction site, delivery inspection reports issued by SELLER’s quality control group, indicating the supply/transportation pending issues.

* + 1. Purchase Order (PO) for Hull Engine Room equipment - issuance to BUYER of the purchase order(s), without monetary value, signed by SELLER and equipment supplier, defined in the contractual Vendor List, whose scope of supply shall be in accordance with the respective material requisition and/or related technical specification. The PO(s) shall include the pre-operation and start-up spare parts, fully complying with Exhibit V - DIRECTIVES FOR ACQUISITIONS. Consider as Hull critical equipment the following TAGs:
* ER Pump Package (B-5330502A/C, B-5330509A/B, B-5111501A/C, B-, B-5120503A/D, B-5241501A/B, B-5241502A/B);
* Purifier Room Equipments (B-5133501A/B, B-5133502A/B; SC-5133501A/B; SAO-5330501);
* MV / LV Electric and Automation Panels (PN-5520505, PN-5520506, PN-5520507, PN-UC-5134501A/E-02, PN-UM-5121501A/B, PN-Z-5121501A/B, PN-5143501/2/3/4/5/6/7/8/9/10, PN-5148501/2/3/4/5/6, PN-5143531/2/3/4, PN-UH-5139502-02, PCC-BT-5265501A/B, PN-UH-5139502A/B-01, PN-UH-5139501, PN-Z-5260501A/B, PN-Z-5312502A/B, PN-UH-1359506A/B, PN-V-5125501A/B);
* HPU Room Equipment (UH-5139501, UH-5139502A/B, UH-5139503A/B, UH-5139504, UH-5139505A/B, UH-1359506A/B);
* Sewage Package (Z-5312502A/B);
* Unit Cooling System (B-5120503A/D, P-5120501A/B).
  + 1. Delivery of Hull critical equipment (see TAGs on above item) - issuance to BUYER of the Factory Acceptance Test Reports approved by SELLER and classification society, if applicable. Equipment, in the totality of the purchase order (s), delivered on Hull construction site, including delivery inspection reports issued by SELLER´S quality control group, indicating the supply/transportation pending issues.

Purchase Order (PO) of Unit's Mooring, Fixed Boom Cranes and Pull-in Systems (TAGs Z-5139505A/G, Z-5139504A/G, Z-5139502A/G, Z-5139503A/G, Z-Z-5139501A/D-01, Z-Z-5139501A/D-02, PN-Z-5139505A/G, PN-Z-5139504A/G, PN-Z-5139502A/G, PN-Z-5139503A/G, UH-5139505A/B, PN-UH-5139505A/B, GN-Z-5139501A/D, GC-Z-5139501A/D, GD-5266501, GD-5266502, GN-5268501/502/503, Z-5268501/502) - issuance to BUYER of the purchase order(s), without monetary value, signed (s) by SELLER and equipment supplier(s), defined in the contractual Vendor List, whose scope of supply shall be in accordance with the respective material requisition and/or related technical specification. The PO(s) shall include the pre-operation and start-up spare parts, fully complying with Exhibit V- DIRECTIVES FOR ACQUISITIONS.

Note 5: When a package TAG is mentioned above, all the items related to the package shall be considered for the Milestone accomplishment.

Note 6: For materials / equipment not included in the contractual Vendor List (Appendix VII of Exhibit V - Directives for Acquisitions), the applicable contractual provision shall be adopted.

Note 7: For equipment delivery events, evidence shall be presented by SELLER that there is no pending payment with the respective suppliers/vendors, considering the phases until the delivery of each equipment.

* 1. **Hull**
     1. Delivery of the Hull steel material 40% - Receipt on shipyard of 40% of the steel material, in weight, for Hull construction. Percentage in weight defined in accordance with the latest update of Material Take Off (MTO). All material shall have the Quality Certificates presented to BUYER, approved by the SELLER and by the classification society, if applicable.
* [Weight contained in the Material Requests (or similar document) issued by SELLER]/(total weight of the marine/hull discipline in accordance with the latest revision of the Weight Control Report issued by SELLER).
  + 1. Strike Steel – Beginning of the steel cutting.
    2. Keel Laying – First painted block is placed in the Site (dry dock/floating dock/ erection area) in which the hull/mega block will be erected (blocks will be joined together to form the hull/mega block) It must be duly certified by the Classification Society.
    3. Installation of Hull Engine Room Equipment, including piping and cable connections – installation of all TAGs described on item 5.2.18, except for the Firefighting pumps UB-5420501A/B/C/D and B-5420502A/B, as well as listed TAGs bellow:
* ER room Transformers units (TF-5143502A/B, TF-5143503A/B, TF-5143520A/B, TF-5143521A/B)
* Fresh Water Hydrophore Unit (Z-5115501)
* Calorifier Unit (Z-5125501)
* Ultraviolet Sterilizer Unit (Z-5121501A/B)
* HVAC Package (UR-5252501A/D, B-5252501A/D, B-5252502A/B, B-5252503A/B, AC-5252501A/B, EXT-5255501A/B, EXT-5255502A/B, EXT-5255518A/B, VT-5254501A/B, VT-5254502A/B, VT-5254518A/B)
  + 1. Installation of Hull firefighting pumps – Installation of hull firefighting pumps (UB-5420501A/B/C/D and B-5420502A/B), including piping and cable connections.
    2. Blocks erection (50%) – 50%, by weight, of the blocks erected. An erected block is any block installed, aligned, and welded to other blocks in the Hull erection area, or in its mega block erection area. Any and all junction welds which it is possible to weld shall be properly welded, inspected and approved by the Classification Society (including the verification of NDTs).
    3. Load Test of Auxiliary and Emergency Generators - for the following TAGs and related SSOPs in accordance with the Exhibit VIII (Directives for Commissioning). TAGs UG-5262502, UG-5261501 and UG-5262501. Tests performed in accordance with the procedure approved by BUYER, with a report issued and approved by SELLER and Classification Society (if applicable).
    4. Performance acceptance tests of critical hull SOPs: Performance acceptance tests – Phase 1 (TAP-1) executed by SELLER and approved by Buyer considering all hull SSOPs of the systems listed below:
       - 1300 – BSDL (DIVERLESS BELL MOUTH)
       - 1358 – CARGO TANKS AND VOID SPACES,
       - 5111 – SEA WATER,
       - 5115 – FRESH WATER (only mechanical completion and possible functional testing for these phases will be required),
       - 5121 – POTABLE WATER (only mechanical completion and possible functional testing for these phases will be required),
       - 5124 – COOLING WATER,
       - 5133 – DIESEL,
       - 5134 – COMPRESSED AIR,
       - 5138 – START UP AIR,
       - 5139.1 – HYDRAULIC POWER UNIT- Vessel (REMOCON)
       - 5143 – NORMAL ELECTRICAL DISTRIBUTION,
       - 5145 – NORMAL LIGHTING,
       - 5148 – ESSENTIAL ELECTRICAL DISTRIBUTION,
       - 5149 – ESSENTIAL LIGHTING,
       - 5251 – VENTILATION,
       - 5252 – AIR CONDITIONING,
       - 5261 – ELECTRICAL EMERGENCY GENERATOR (except tests involving Topsides),
       - 5262 – ELECTRICAL AUXILIARY GENERATOR (except tests involving Topsides),
       - 5263 – EMERGENCY LIGHTING,
       - 5264 – TELECOMMUNICATION POWER,
       - 5265 – DIRECT CURRENT AND UPS,
       - 5269 – EMERGENCY ELECTRICAL DISTRIBUTION,
       - 5310 – SEWAGE,
       - 5335 – BALLAST,
       - 5423 – FIREFIGHTING WATER (only firefighting pumps test),
       - 5424 – FIREFIGHTING FOAM,
       - 5522 – FIRE AND GAS DETECTION
       - 5523 – AUTOMATION / SUPERVISION AND OPERATION CONTROL (only for the SSOPs of this phase),
       - 5591 – AUTOMATION NETWORK (only for the SSOPs of this phase),

Hull Float Off – Hull withdrawal from the dry/floating dock and moored at the pier/quay, with all hull blocks integrated, all underwater blocks’ junction welds properly inspected and approved by SELLER Quality Control and the Classification Society (including NDT verification) and inspected by BUYER, so that there is no need to return to the dry dock.

1. All underwater hull blocks shall have all structural NTD reports approved by Seller quality control and verified by Buyer after its erection in the dock and fulfilling the requirements of Notes 8, 9 10 and 10A). The assembly of the lower riser balcony and all other underwater hull structures/outfitting/appurtenances/piping are part of this Milestone.
2. Issuance of a report by Classification Society surveyor confirming that all underwater works (structure, painting, etc.) are completed and in accordance with Classification Society requirements. Hull facilities to allow proper underwater inspection in lieu of drydocking survey to be included in Classification Society report.

Note 8: All underwater hull markings, hull anodes, sea chests and its accessories, cathodic protection system (ICCP), overboard discharges, diver facilities, etc. to be included in the inspection before floating off and approved by BUYER and Classification Society.

Note 9: All underwater hull area to be coated with complete painting scheme and approved by BUYER and Painting Manufacturer. Painting Manufacturer inspector report to be issued and presented to BUYER.

Note 10: All final assembly/dimension control reports for Lower Riser Balcony structure and its associated items/equipment for subsea interface to be issued and approved by BUYER.

Note 10A: All certificates for underwater works/material (steel plates, sea valves, etc.) to be presented to BUYER.

* + 1. Hull Substantial Completion – Hull completed assembled/erected with all hull and appurtenances blocks integrated, all blocks’ junction welds properly inspected and approved by BUYER and Classification Society (including NDT verification), and with all marine systems commissioned and tests performed as described on sub-item “v”.

1. Hull must have all structural/piping NDT reports approved by BUYER, after its erection/assembling and fulfilling the requirements of Note 13A.
2. Preservation: Hull and all its systems/equipment must be preserved based on a preservation plan presented by SELLER (as per Exhibit VIII requirements) for execution by SELLER during the subsequent phases until unit delivery.
3. Stagger Test - perform the "Stagger Test" and issue the approved report by the Classification Society.
4. Module 15B is part of hull and shall be lifted and fully integrated to Hull.
5. The Hull subsystems (SSOPs) of all systems (SOPs) and their predecessors must be commissioned (see item 3.2).

Note 11: All tie-in points shall be mapped and listed in a document to be submitted to BUYER.

Note 12: All support structures for modules and any other interface structural items shall have their contact points leveled, properly mapped, and listed in a dimensional control report, to be submitted to BUYER.

Note 13: For this Milestone, living quarter’s habitability is not mandatory (according to Habitability Milestone described in the Integration phase), but this module/block shall be lifted and fully integrated to Hull.

Note 13A: A completed hull means that all systems and equipment are installed and commissioned; in addition, all internal and external painting completed and approved by paint manufacturer, BUYER, and Classification Society (if applicable), following the requirements of Exhibit IV.

* 1. **Topsides**
     1. Delivery of structure steel material 40% - Receipt on fabrication sites of 40% of the structure steel material, in weight, for pancake fabrication. Percentage in weight defined in accordance with the latest update of Material Take Off (MTO). All material shall have the Quality Certificates presented to BUYER, approved by the SELLER and by the classification society, if applicable.
* [Weight contained in the Material Requests (or similar document) issued by SELLER]/(total weight of the modules primary and secondary structure discipline in accordance with the latest revision of the Weight Control Report issued by SELLER).
  + 1. Finish “pancake” fabrication for Power Generation Module(s) (M-12, M-13, M-13B) - End of pancake fabrication (modules first deck/elevation), in accordance with “released for construction” drawings. Issuance of all quality reports (dimensional, visual inspection and non-destructive testing) approved by SELLER and Classification Society (if applicable).
    2. Finish “pancake” fabrication Compression Module(s) (M-02, M-05, M-05B, M-07A/B) - End of pancake fabrication (modules first deck/elevation), in accordance with “released for construction” drawings. Issuance of all quality reports (dimensional, visual inspection and non-destructive testing) approved by SELLER and Classification Society (if applicable).
    3. Finish “pancake” fabrication for Utilities Module(s) (M-15) - End of pancake fabrication (modules first deck/elevation), in accordance with “released for construction” drawings. Issuance of all quality reports (dimensional, visual inspection and non-destructive testing) approved by SELLER and Classification Society (if applicable).
    4. Finish “pancake” fabrication for Electric/Automation Module(s) (M-17) - End of pancake fabrication (modules first deck/elevation), in accordance with “released for construction” drawings. Issuance of all quality reports (dimensional, visual inspection and non-destructive testing) approved by SELLER and Classification Society (if applicable).
    5. Finish “pancake” fabrication for the Pig Lauchers/Receivers, Oil processing and Produced Water treatment Modules (M-09, M-10A, M-10B and M-10C). End of pancake fabrication (modules first deck/elevation), in accordance with "released for construction" drawings. Issuance of all quality reports (dimensional, visual inspection and non-destructive testing) approved by SELLER and Classification Society (if applicable).
    6. Finish “pancake” fabrication for the CO2 Removal, Gas Dehydration and Laydown Area Modules (M-04, M-06 and M16) - End of pancake fabrication (modules first deck/elevation), in accordance with "released for construction" drawings. Issuance of all quality reports (dimensional, visual inspection and non-destructive testing) approved by SELLER and Classification Society (if applicable).
    7. Finish “pancake” fabrication for the Flare System, Water Injection and Chemical Unit Modules (M-01, M11 and M-14) - End of pancake fabrication (modules first deck/elevation), in accordance with "released for construction" drawings. Issuance of all quality reports (dimensional, visual inspection and non-destructive testing) approved by SELLER and Classification Society (if applicable).
    8. Power Generation Modules Fabrication (50%) (M-12, M-13, M13B) – Main Power Generators installed in the module(s), 50% of other module(s) equipment (except for instruments and the equipment located inside the skid) installed and 50% of piping, in weight, assembled and supported in their definitive piping supports. Issuance of all quality reports (dimensional, visual inspection and non-destructive testing) approved by SELLER and Classification Society (if applicable). The module fabrication shall comply with Preservation requirements of this document (item g) of Section 3.1).

* + 1. Power Generation Modules Completion (M-12, M-13, M-13B) - Completion of module(s) (as per item 3.1). All quality reports issued during construction shall be submitted to BUYER with the approval of SELLER and Classification Society, if applicable. The reports shall include all stages of modules fabrication and assembly, all applicable disciplines and the pending issues clearly indicated by SELLER and accepted by BUYER.
    2. Compression Modules Fabrication (50%) (M-02, M-05, M-05B, M-07A/B) – Compressors installed in the module(s), 50% of other module(s) equipment (except for instruments and the equipment located inside the skid) installed and 50% of piping, in weight, assembled and supported in their definitive piping supports. Issuance of all quality reports (dimensional, visual inspection and non-destructive testing) approved by SELLER and Classification Society (if applicable). The module fabrication shall comply with Preservation requirements of this document (item g) of Section 3.1).
    3. Compression Modules Completion (M-02, M-05, M-05B, M-07A/B) - Completion of module(s) (as per item 3.1). All quality reports issued during construction shall be submitted to BUYER with the approval of SELLER and Classification Society, if applicable. The reports shall include all stages of modules fabrication and assembly, all applicable disciplines and the pending issues clearly indicated by SELLER and accepted by BUYER.
    4. Oil Treatment Modules Completion (M-10A, M-10B, M-10C) - Completion of module(s) (as per item 3.1). All quality reports issued during construction of the modules shall be submitted to BUYER with the approval of SELLER and Classification Society, if applicable. The reports shall include all stages of modules fabrication and assembly, all applicable disciplines and the pending issues clearly indicated by SELLER and accepted by BUYER.
    5. Gas Treatment Modules Completion (M-04, M-06) - Completion of module(s) (as per item 3.1). All quality reports issued during construction of the modules shall be submitted to BUYER with the approval of SELLER and Classification Society, if applicable. The reports shall include all stages of module fabrication and assembly, all applicable disciplines and the pending issues clearly indicated by SELLER and accepted by BUYER.
    6. Utilities and Electric/Automation Module(s) Completion (M-15, M-17) – Completion of module(s) (as per item 3.1). All quality reports issued during construction of the modules shall be submitted to BUYER with approval of SELLER and Classification Society, if applicable. The reports shall include all stages of modules fabrication and assembly, all applicable disciplines and the pending issues clearly indicated by SELLER and accepted by BUYER.
    7. Other Unit Modules Completion - remaining modules based in the General Arrangement - I-DE-3010.2D-1200-942-P4X-002, including flare tower/stack. Completion of modules (according to item 3.1). All quality reports issued during construction of the modules shall be submitted to BUYER with approval of SELLER and Classification Society, if applicable. The reports shall include all stages of modules fabrication and assembly, all applicable disciplines and the pending issues clearly indicated by SELLER and accepted by BUYER.
    8. Lifting of the First Topsides Modules – start of the lifting campaign, including the issuance of an inspection report describing the lifting conditions and positioning of the modules on hull.

5.4.17.1The scope of this Milestone shall include, as a minimum, the Automation and Electrical Module (M-17) and Power Generation Modules (M-12, M-13, M-13B).

* + 1. Lifting of the Last Topsides Modules - remaining modules based in the General Arrangement - I-DE-3010.2D-1200-942-P4X-002. End of the lifting campaign, including the issuance of an inspection report describing the lifting conditions and positioning of the remaining modules on hull. The lift and positioning of the flare stack/tower is not included in the scope of this Milestone.
    2. Start of Topside Spool Fabrication – (i) Complete 20% of piping fabrication, measured in weight (ton). All applicable NDTs shall be done, and all inspection reports issued by SELLER according to Quality Management System requirements, and approvals by classification society, if necessary. This Milestone payment shall only occur after the approval of the 60% Design Review and the delivery of the CAE tool databases with a 60% maturity; (ii) 60% of shop drawings shall be delivered by SELLER to BUYER with “Approved for Construction” status; (iii) SELLER shall issue material take off at least 90% of modules piping; (iv) Pipe Shops for piping fabrication equipped with all the required machinery shall be mobilized on modules assembly site(s).
    3. Delivery of Exotic Material Piping – 95% of the total exotic piping material take off delivered at the piping spool fabrication site(s)/shop(s). SELLER shall deliver to BUYER all inspection reports issued according to Quality Management System requirements, and approvals by classification society, if applicable. The exotic materials that shall be considered are listed below:
* A928 (UNS S31803 CL1 or 3)
* ASTM A182 Grade F 51 (UNS S31803)
* A240 UNS31803
* ASTM A815 Gr UNS S31803
* ASTM A790 Gr UNS S32760
* ASTM A928 Gr UNS S32760
* ASTM A182 Grade F 55 (UNS S32760)
* ASTM A240 (UNS S32760)
* ASTM B444-625 (UNS N06625)
* ASTM B564 (UNS N06625)
* Cu-Ni 90/10 (UNS C70620)
  1. **Integration**
     1. FPSO Power Generation System Full Load Test - Tests carried out according to criteria established on Exhibit VIII (Directives for Commissioning) and approved procedure by BUYER, as well as report issued and approved by SELLER, Classification Society and BUYER.

1. The subsystems (SSOPs) of the systems (SOPs) listed below, and their predecessors, required for the Full Load, shall be commissioned (see item 3.2).
   * + - 5111 SEA WATER LIFT AND DISTRIBUTION
       - 5124 COOLING WATER
       - 5133 DIESEL
       - 5134 INSTRUMENT / SERVICE AIR
       - 5143 NORMAL ELECTRICAL DISTRIBUTION
       - 5145 NORMAL LIGHTING
       - 5147 ELECTRICAL TURBO GENERATOR
       - 5148 ESSENTIAL ELECTRICAL DISTRIBUTION
       - 5149 ESSENTIALLIGHTING
       - 5252 AIR CONDITIONING
       - 5261 ELECTRICAL EMERGENCY GENERATOR
       - 5262 ELECTRICAL AUXILIARY GENERATOR
       - 5263 EMERGENCY LIGHTINING
       - 5265 DIRECT CURRENT AND UPS
       - 5336 DRAINAGE AND SLOP VESSEL
       - 5523 AUTOMATION / SUPERVISION AND OPERATION CONTROL
       - 5520 DATA AQUISITION, SUPERVISION AND CONTROL SYSTEM
     1. Completion of Piping Hook-up Assembly, in accordance with the most updated list of Tie-ins. (hook up spools between modules and modules-Hull), with final/definitive piping supports, and all the non-destructive tests and hydrostatic tests carried out. Required evidences include the issuance of quality reports evidencing the conformity/traceability of the applied materials, tests results and pending issues clearly indicated by SELLER and accepted by BUYER.
2. All piping remaining scope from modules completion shall be 100% completed (related to Topsides Milestones item 5.4).
3. All scope related to Hook-up, including painting, thermal insulation and/or passive protection shall be completed.
   * 1. Critical Topsides sub-systems commissioned – End of SSOPs commissioning of the SOPs listed below, as defined in item 3.2, and below requested tests.
4. Test/Simulation of the Process Plant with Safe Fluid (according to criteria established on Exhibit VIII (Directives for Commissioning) and test procedure approved by BUYER.: All SSOPs of System 1223 - Petroleum Process commissioned as per item 3.2.
5. All SSOPs of the SOPs listed below shall be commissioned (see item 3.2):
   * + - 5111 SEA WATER LIFT AND DISTRIBUTION
       - 5115 FRESH WATER TANKS AND DISTRIBUTION
       - 5124 COOLING WATER
       - 5133 DIESEL
       - 5134 INSTRUMENT/SERVICE AIR
       - 5139.2 – HYDRAULIC POWER UNIT- Topside
       - 5139.3 – HYDRAULIC POWER UNIT- Subsea
       - 5143 NORMAL ELECTRICAL DISTRIBUTION
       - 5145 NORMAL LIGHTING
       - 5147 ELECTRICAL TURBO GENERATOR
       - 5148 ESSENTIAL ELECTRICAL DISTRIBUTION
       - 5149 ESSENTIAL LIGHTING
       - 5252 AIR CONDITIONING
       - 5263 EMERGENCY LIGHTING
       - 5265 DIRECT CURRENT AND UPS
       - 5266 CRANE
       - 5268 PULL IN/PULL OUT STATION
       - 5336 DRAINAGE AND SLOP VESSEL
       - 5423 FIREFIGHTING WATER
       - 5424 FIREFIGHTING FOAM
       - 5428 FIREFIGHTING PORTABLE EQUIPMENT
       - 5523 AUTOMATION/SUPERVISION AND OPERATION CONTROL
       - 5522 FIRE AND GAS DETECTION
       - 5520 DATA AQUISITION, SUPERVISION AND CONTROL SYSTEM
     1. Habitability - completion of the accommodation block according to the criteria below, including common areas released for use as well as the facilities related to the overnight stay. Related SSOPs of the SOPs listed below shall be commissioned (see item 3.2). Certificates for air conditioning and ventilation ducts cleaning, fresh water storage tank and pipelines cleaning and pest control certificate shall be presented.
        + 1353 – HELIDECK;
        + 5111 – SEA WATER,
        + 5115 – FRESH WATER,
        + 5121 – POTABLE WATER,
        + 5122 – FRESH WATER MAKER;
        + 5125 – HOT WATER;
        + 5124 – COOLING WATER,
        + 5133 – DIESEL,
        + 5134 – COMPRESSED AIR,
        + 5138 – START UP AIR,
        + 5143 – NORMAL ELECTRICAL DISTRIBUTION,
        + 5145 – NORMAL LIGHTING,
        + 5262 – ELECTRICAL HULL GENERATOR 6.6 KV 7MW
        + 5148 – ESSENTIAL ELECTRICAL DISTRIBUTION,
        + 5149 – ESSENTIAL LIGHTING,
        + 5251 – VENTILATION,
        + 5252 – AIR CONDITIONING,
        + 5261 – ELECTRICAL EMERGENCY GENERATOR,
        + 5262 – ELECTRICAL AUXILIARY GENERATOR,
        + 5263 – EMERGENCY LIGHTING,
        + 5264 – TELECOMMUNICATION POWER,
        + 5265 – DIRECT CURRENT AND UPS,
        + 5269 – EMERGENCY ELECTRICAL DISTRIBUTION,
        + 5310 – SEWAGE,
        + 5336 – DRAINAGE/SLOP (OPEN DRAIN);
        + 5423 – FIREFIGHTING WATER,
        + 5424 – FIREFIGHTING FOAM,
        + 5425 – FIREFIGHTING INERT GAS,
        + 5431 – LIFE SAVING
        + 5511 – TELECOMUNICATION SPECIALIZED
        + 5512 – TELLECOMUNICATION TRANSMISSION
        + 5514 – CLOSED-CIRCUIT TELEVISION (CCTV)
        + 5515 – OPERATIONAL RADIO
        + 5516 – TELECOMMUNICATION VOICE
        + 5517 – TELECOMMUNICATION DATA
        + 5518 – PUBLIC ADDRESSAND GENERAL ALARM (PAGA)
        + 5522 – FIRE AND GAS DETECTION
        + 5523 – AUTOMATION / SUPERVISION AND OPERATION CONTROL,
        + 5591 – AUTOMATION NETWORK,
        + 6410 – FILLING STATION;
        + 8214 – GALLEY
        + 8215 – HOSPITAL SYSTEM
        + 8217 – RADIO ROOM
        + 8221 – CENTRAL CONTROL ROOM & LER
        + 8224 – MECHANICAL WORKSHOP/ELECTRICAL WORKSHOP/ WELDING WORKSHOP/PAINT STORE
        + 8226 – STORES SYSTEM
        + 8230 – LAUNDRY
        + 8233 – MALE AND FEMALE CHANGE ROOM
        + 8237 – CABINS AND ACCOMODATION DECK SYSTEM
        + 8238 – RECREATION ROOMS/GYMNASIUM
        + 8243 – AUDITORIUM
        + 8249 – LIBRARY
     2. Gas Compression and Treatment System testing
6. Test of Gas Compressors in closed loop/circuit with inert gas (in accordance with the criteria established on Exhibit VIII (Directives for Commissioning) and procedure approved by BUYER: TAP-1 performed and signed for all SSOPs of SOP 1231 - Gas Processing/Handling, 1252 - Gas Injection System, 1254 - CO2 Compression, and 1225 - Vapor Recovery System:
   * + - This Milestone comprises the Main, Export, Injection, CO2 and VRU compressors;
       - Run Test on the closed circuits/loops on each machine, to verify machine proper conditions, control logic, instruments and start-up sequence. Test shall include the seal gas systems of each machine.
7. Gas Treatment testing with inert gas, in accordance with the criteria established on Exhibit VIII (Directives for Commissioning) and procedure approved by BUYER: TAP-1 performed and signed for all SSOPs of SOPs 1233 - Gas Dehydration, 1238 - Hydrocarbon Dew Point, 5135 – Fuel Gas.
   * 1. Substantial completion - the Milestone shall be accepted upon the achievement of the following conditions:
   1. Issuance and acceptance of the Substantial Completion Certificate (as per item 6);
   2. Compliance with the regulatory requirements of the Regulatory Standards of the Ministry of Economy (NRs);
   3. Compliance with ANP requirements: Measurement system and SGSO;
   4. Perform the black start-up test of the whole system where the time to normalize the operation is checked (time required for the Unit to be ready to start operation of the process plant);
   5. Final pressurization of oil/water separation and treatment systems, gas collection/treatment/compression systems, including fuel gas. The pressurization shall be performed with fresh water or N2 (where applicable), reaching pressure levels of “settling-out” or system operational pressure. An operational procedure shall be issued by SELLER and approved by BUYER. Final pressurization is a necessary condition to proceed to the final offshore location;
   6. Loading of CO2 separation membranes according to the Exhibit VIII (Directives for Commissioning);
   7. Evidence/proof of compliance regarding the preservation and maintenance plan (hull and modules) in accordance with the Exhibit VIII (Directives for Commissioning);
   8. Signature and agreement on Corrosion Protection Performance Guarantee (Coating Warranty) by the parties involved as per applicable contractual requirements (including but not limited to: inspection report, delivery of the painting scope databook and maintenance book/procedures as per Agreement requirements and Exhibit IV);
   9. Reports evidencing Hull and niche areas cleaning (all surfaces of the hull’s underwater areas) as per Exhibit I requirements.
      1. Unit handover - the milestone shall be accepted when the FPSO arrives in its final location in Brazil and upon the achievement of the following conditions:
8. Issuance and acceptance of the Handover Certificate (as per item 6);
9. Unit Customs Clearance
10. Delivery of Capital Spares (as per Exhibit I and Exhibit V requirements) - delivery to BUYER of all parts including related tests and technical documents approved by SELLER and classification society, if applicable. Material/equipment, delivered on location based on above Exhibits requirements.
    1. **Acceptance**

NOTE 14: All mechanically completed and commissioned systems (in accordance with item 3.2 and related to the acceptance Milestones) shall have manuals and all the necessary documentation for operation (data book) delivered to BUYER.

* + 1. First Oil Production - SELLER shall inform BUYER in writing, after meeting the minimum requirements for acceptance of the Milestone as described below:

5.6.1.1 SSOPs readiness (as per Exhibit VIII - Directives for Commissioning) and seventy-two (72) hours of continuous operation for first production train with the achievement of the process/design specifications established in the design documentation.

5.6.1.2 List of SOPs related to this Milestone to be broken down into SSOPs: 1210 - WELL; 1212 - CRUDE OIL METERING; 1223 - PETROLEUM PROCESS; 1300 – BSDL (DIVERLESS BELL MOUTH), 5271 - CARGO TANK CLEANING AND RECIRCULATION; 5336 - DRAINAGE / SLOP; 1244 - WELL PIG LAUNCHERS, 1261 - CHEMICAL INJECTION FOR OIL AND GAS, 1262 - CHEMICAL INJECTION FOR OILY WATER, 1357- MOORING, 1358- CARGO TANKS AND VOID SPACES, 1359 – OFFLOADING AND TELEMETRY, 5125 – HOT WATER, 5133- DIESEL/WELL SERVICE PUMP, 5139 HYDRAULIC POWER UNIT – TOPSIDE AND SUBSEA, 5241- INERT GAS, 5268- PULL IN / PULL OUT STATION, 5335- BALLAST, 5412 – FLARE (except FGRS), 5524 – SUBSEA/RESERVOIR MONITORING, 5529 – RISER MONITORING.

5.6.1.3 When SELLER, duly based on the Agreement and Exhibits requirements, believes that all requirements to be performed by SELLER for starting oil production have been satisfied, including the achievement of TTAS-1 for the subsystems related to the systems listed in item 5.6.1.2, SELLER shall deliver to BUYER a notice of “Ready for First Oil”. Within four (4) days after receipt of a Notice of “Ready for First Oil”, BUYER shall proceed as per item 2 and, if Unit achieves the requirements, BUYER will perform the procedures to start operation.

NOTE 15: In the event that four (4) months after the Handover Milestone it is not possible to achieve completion to this Milestone due to causes attributed exclusively to BUYER, this Milestone will be considered completed.

* In the event that the Milestone is not completed for reasons attributed to the SELLER, this period does not apply; in case of concurrent events (attributed to BUYER and SELLER), a joint analysis shall be carried out (cause, responsible and remediation period) and thus the events under the responsibility of the SELLER shall not be considered within the above period.
  + 1. First Oil TAP-2 – SELLER shall inform BUYER in writing, after meeting the minimum requirements for acceptance of the Milestone as described below:

5.6.2.1 TAP-2 approval as per Exhibit VIII (Directives for Commissioning) requirements and Commissioning Procedure approved by BUYER for the SOPs described in item 5.6.1.2 with the achievement of the process/design specifications established in the design documentation. The activities planning/scheduling for this step shall be performed with the approval of BUYER (based on production priorities).

NOTE 16: The pending issues approved by BUYER shall be attached to each TAP-2 (punch list) and shall have an action plan submitted by SELLER. After the settlement of the pending issues, the TTAS-2 will be issued. If BUYER and SELLER disagree on the interpretation of the results of any Acceptance Test, each shall give a statement of its views to the other within five (5) days after such disagreement arises. The statement shall be accompanied by all relevant evidence. If the Parties fail to reach an agreement as to whether the minimum acceptance criteria have been fulfilled within twenty (20) days of the submission by the parties pursuant to the above, then Agreement Dispute Resolution Clause shall be followed.

* + 1. Gas Compression, Injection and Offloading – also includes Turbogenerators ready to run on fuel gas and Vapor Recovery Unit running in continuous operation. SELLER shall inform BUYER in writing, after meeting the minimum requirements for acceptance of the Milestone as described below:

5.6.3.1 SSOPs readiness (as per Exhibit VIII - Directives for Commissioning) and seventy-two (72) hours of continuous operation with the achievement of the process/design specifications established in the design documentation. As a minimum condition, the following SSOPs shall be ready:

2 Main Gas Compressors and GDU;

5 Turbogenerators ready to run on fuel gas;

2 Injection compressors;

1 Vapor recovery unit;

2 export/booster compressors

SOPs (1210 - WELL, 1231 - GAS PROCESSING/HANDLING; 1252 - GAS INJECTION; 1233 - Gas Dehydration, 1225 – VAPOR RECOVERY UNIT and 5412 – FLARE, except FGRS)

SOPs related to main offloading station (1212 - CRUDE OIL METERING, 1358 - CARGO TANKS AND VOID SPACES; 1359 - OFFLOADING; 5241 - INERT GAS for Cargo Tanks blanketing).

NOTE 17: In the event that four (4) months after the fulfillment of the Milestone 5.6.1 it is not possible to reach the fulfillment of this Milestone due to causes attributed exclusively to BUYER, this Milestone will be considered reached.

* In the event that the Milestone is not met for reasons attributed to the SELLER, this period does not apply; in case of concurrent events (attributed to BUYER and SELLER), a joint analysis shall be carried out (cause, responsible and remediation period) and thus the events under the responsibility of the SELLER should not be considered within the above period.

5.6.3.2 When SELLER, duly based on the Agreement and Exhibits requirements, believes that all requirements to be performed by SELLER for starting gas reinjection have been satisfied, including the achievement of TTAS-1 for the subsystems related to the systems listed in item 5.6.3.1(i to vi), SELLER shall deliver to BUYER a notice of ”Ready for Gas Reinjection”. Within four (4) days after receipt of a Notice of ”Ready for Gas Reinjection”, the BUYER shall proceed as per item 2 and, if Unit achieves the requirements, BUYER will perform the procedures to start operation.

* + 1. Gas Compression, Injection and Offloading TAP-2 – also includes Turbogenerators running with fuel gas and Vapor Recovery Unit running in continuous operation. Seller shall inform BUYER, in writing, after meeting the minimum requirements for acceptance of the Milestone as described below:

5.6.4.1 TAP-2 approval as per Exhibit VIII (Directives for Commissioning) requirements, in compliance with note 16, and Commissioning Procedure approved by BUYER for the SOPs described below with the achievement of the process/design specifications established in the design documentation. The activities planning/scheduling for this step shall be performed with the approval of BUYER (based on production priorities).

5.6.4.2 List of SOPs related to this Milestone to be broken down into SSOPs: 1210 – WELL, 1231 - GAS PROCESSING / HANDLING ; 1252 - GAS INJECTION; 1233 - GAS DEHYDRATION, 1238 - HYDROCARBON DEW POINT, 1225 – VAPOR STEAM RECOVERY; 5412- FLARE, included FGRS; 1212 - CRUDE OIL METERING, 1348 - CARGO TANKS AND VOID SPACES; 1359 - OFFLOADING (both stations); 5241.1 - INERT GAS for Cargo Tanks blanketing; 5147 ELECTRICAL TURBO GENERATOR (running on fuel gas).

* + 1. Water treatment and injection - SELLER shall inform BUYER, in writing, after meeting the minimum requirements for acceptance of the Milestone as described below:

5.6.5.1 SSOPs readiness (as per Exhibit VIII - Directives for Commissioning) and seventy-two (72) hours of continuous operation with the achievement of the process/design specifications established in the design documentation. As a minimum condition, 100% of plant capacity shall be ready.

5.6.5.2 List of SOPs related to this Milestone to be broken down into SSOPs:

Water injection: 5111 - SEA WATER– 1251 - WATER INJECTION– 1263 - CHEMICAL INJECTION FOR INJECTION WATER / SEA WATER; 1210 – WELL;

Water treatment: 5122 – FRESH WATER MAKER FOR OIL DILUTION, 5331 - PRODUCED WATER TREATMENT

5.6.5.3 When SELLER, duly based on the Agreement and Exhibits requirements, believes that all requirements to be performed by SELLER for starting the treatment and discard of produced water have been satisfied, including the achievement of TTAS-1 for the subsystems related to the systems listed in item 5.6.5.2 - ii, SELLER shall deliver to BUYER a notice of “Ready for Produced Water”. Within four (4) days after receipt of a Notice of “Ready for Produced Water”, the BUYER shall proceed as per item 2 and, if Unit achieves the requirements, BUYER will perform the procedures to start operation.

5.6.5.4 When SELLER, duly based on the Agreement and Exhibits requirements, believes that all requirements to be performed by SELLER for starting the injection of water have been satisfied, including the achievement of TTAS-1 for the subsystems related to the systems listed in item 5.6.5.2 - i, SELLER shall deliver to BUYER a notice of “Ready for Water Injection”. Within four (4) days after receipt of a Notice of “Ready for Water Injection”, the BUYER shall proceed as per item 2 and, if Unit achieves the requirements, BUYER will perform the procedures to start operation.

NOTE 18: In the event that six (6) months after the fulfillment of the Milestone 5.6.1 it is not possible to achieve completion to this Milestone due to causes attributed exclusively to BUYER, this Milestone will be considered completed.

* In the event that the Milestone is not completed for reasons attributed to the SELLER, this period does not apply; in case of concurrent events (attributed to BUYER and SELLER), a joint analysis shall be carried out (cause, responsible and remediation period) and thus the events under the responsibility of the SELLER shall not be considered within the above period.
  + 1. Water treatment and injection TAP-2 - SELLER shall inform BUYER, in writing, after meeting the minimum requirements for acceptance of the Milestone as described below:

5.6.6.1 TAP-2 approval as per Exhibit VIII (Directives for Commissioning) requirements, in compliance with Note 16, and Commissioning Procedure approved by BUYER for the SOPs described in item 5.6.5.2 the achievement of the process/design specifications established in the design documentation. The activities planning/scheduling for this step shall be performed with the approval of BUYER (based on production priorities).

* + 1. Gas treatment (CO2), Export and gas lift - SELLER shall inform BUYER, in writing, after meeting the minimum requirements for acceptance of the Milestone as described below.

5.6.7.1 SSOPs readiness (as per Exhibit VIII - Directives for Commissioning) and seventy-two (72) hours of continuous operation with the achievement of the process/design specifications established in the design documentation.

5.6.7.2 List of SOPs related to this Milestone to be broken down into SSOPs: 1210 – WELL, 1235 – CO2 REMOVAL, 1254 – CO2 COMPRESSION and associated SSOPs for gas exportation and gas lift.

5.6.7.3 When SELLER believes (based on Agreement) that all requirements to be performed by SELLER for starting gas lift have been satisfied, including the achievement of TTAS-1 for the subsystems related to the gas lift listed in item 5.6.7.2, SELLER shall deliver to BUYER a notice of ”Ready for Gas Lift”. Within four (4) days after receipt of a notice of ”Ready for Gas Lift”, the BUYER shall proceed as per item 2 and, if Unit achieves the requirements, BUYER will perform the procedures to start operation.

5.6.7.4 When SELLER believes (based on Agreement) that all requirements to be performed by SELLER for starting gas lift have been satisfied, including the achievement of TTAS-1 for the subsystems related to the gas exportation listed in item 5.6.7.2, SELLER shall deliver to BUYER a notice of ”Ready for Gas Exportation”. Within four (4) days after receipt of a Notice of ”Ready for Gas exportation”, the BUYER shall proceed as per item 2 and, if Unit achieves the requirements, BUYER will perform the procedures to start operation.

NOTE 18: In the event that eight (8) months after the achievement of the Milestone 5.6.1 it is not possible to reach the fulfillment of this Milestone due to causes attributed exclusively to BUYER, this Milestone will be considered reached.

* In the event that the Milestone is not met for reasons attributed to the SELLER, this period does not apply; in case of concurrent events (attributed to BUYER and SELLER), a joint analysis shall be carried out (cause, responsible and remediation period) and thus the events under the responsibility of the SELLER should not be considered within the above period.
  + 1. Gas treatment (CO2), export and gas lift TAP-2 - SELLER shall inform BUYER, in writing, after meeting the minimum requirements for acceptance of the Milestone as described below:

5.6.8.1 TAP-2 approval as per Exhibit VIII (Directives for Commissioning) requirements, in compliance with NOTE 16, and Commissioning Procedure approved by BUYER for the SOPs described in item 5.6.7.2 with the achievement of the process/design specifications established in the design documentation. The activities planning/scheduling for this step shall be performed with the approval of BUYER (based on production priorities).

* + 1. Unit Final Completion - Issuance of the final completion certificate as per item 6 requirements. The final completion of the unit will take place when the full scope of the Agreement is completed, in accordance with the conditions of the Agreement, including, but not limited to:
* Issuance and acceptance of the Final Completion Certificate and compliance with all other acceptance Milestones described in this document;
* Final inspection for complete delivery of the Unit to BUYER in order to clearly indicate the status of the Corrosion Protection Performance Guarantee (all parties responsibilities, maintenance plan status), under the terms of the contractual warranty/guarantee;
  + 1. Unit Final Acceptance - Issuance and acceptance of the Final Acceptance Certificate as per item 6 requirements:
* SELLER shall be entitled to apply to BUYER for a Final Acceptance Certificate not earlier than fourteen (14) days before the date upon which SELLER reasonably considers that it will have achieved Final Acceptance;
* The BUYER shall, within twenty-eight (28) days after Final Acceptance has been achieved, issue a Final Acceptance Certificate to Seller, stating the date on which event was achieved.
  1. **Advance**
     1. Advance Payment - Buyer will provide Seller an Advance Payment of 10% (ten percent) of the Lump Sum Price in order for Seller to perform the Agreement Scope (the “Advance”) in accordance with the Agreement, item 5.2.

# CERTIFICATES TEMPLATES

* 1. The Certificates of Substantial Completion, Handover, Final Completion and Final Acceptance shall follow the models contained on Exhibit XVII.
  2. The Certificates of Release of Claims and Lien Waiver shall follow the model on Exhibit XXVI.

# PRIORITY UNITS/PACKAGES FROM E&I

* 1. Follow below the list of units/packages from Electrical and Instrumentation discipline that shall have their Technical Evaluation Reports approved prior to the Electrical and Instrumentation Architecture document submission:

|  |  |
| --- | --- |
| SEA WATER LIFT PUMP | B-5111001A/F |
| START-UP SEA WATER LIFT PUMP | B-5111002 |
| GAS FLOTATION UNIT | FL-5331001A/B |
| DIESEL HYDRAULIC FIRE WATER PUMPING UNIT | UB-5420501A/D |
| INJECTION WATER MAIN PUMP | B-1251002A/C |
| CARGO PUMP | B-1350501A/T |
| FLOW METERING SYSTEM PANEL | PN-1223001 |
| FLARE GAS RECOVERY SYSTEM RELIEF PANEL | PN-5412001 |
| FLARE IGNITION AND MONITORING PANEL | PN-TA-5412001-01 |
| FLARE TURNDOWN CONTROL SYSTEM | PN-TA-5412001-02 |
| MAIN TURBOGENERATOR UNIT (including WHRU) | TG-5147001A/F |
| VAPOR RECOVERY UNIT | UC-1225001A/B |
| MAIN GAS COMPRESSION UNIT | UC-1231001A/C |
| EXPORT COMPRESSION UNIT | UC-1231002A/D |
| INJECTION GAS COMPRESSION UNIT | UC-1252001A/B |
| CO2 COMPRESSION UNIT | UC-1254001A/B/C |
| FLARE GAS RECOVERY COMPRESSION UNIT | UC-5412001 |
| HYDRAULIC POWER UNIT FOR SUBSEA SYSTEMS | UH-1210001 |
| HPU FOR TOPSIDES VALVES | UH-5139001 |
| CO2 REMOVAL UNIT | UT-1235001 |
| ULTRAFILTRATION UNIT | UT-1251001 |
| SULPHATE REMOVAL UNIT | UT-1251002 |
| HYDRAULIC POWER UNIT FOR SUBMERGED PUMPS | UH-5139502A/B |
| AUXILIARY HYDRAULIC UNIT FOR SUBMERGED PUMPS | UH-5139503A/B |
| HYDRAULIC OIL TRANSFER UNIT FOR SUBMERGED PUMPS | UH-5139504 |
| REMOTE ULLAGE, PRESSURE AND TEMPERATURE MONITORING PANEL and HIGH LEVEL OVERFILL SYSTEM PANEL | PN-1358501 and PN-1358504 |
| OIL AND GAS CHEMICAL INJECTION UNIT | UQ-1261001 |
| PRODUCED WATER CHEMICAL INJECTION UNIT | UQ-1262001 |  |
| INJECTION WATER CHEMICAL INJECTION UNIT | UQ-1263001 |  |