|  |  |
| --- | --- |
| **LIST OF CONTROL MILESTONES** | DATA:  **XX/XX/XXXX** |

SUMMARY

[1 OBJECTIVE 3](#_Toc137223656)

[2 MILESTONES 3](#_Toc137223657)

[2.2 MOBILIZATION 3](#_Toc137223658)

[2.3 DETAIL ENGINEERING 3](#_Toc137223659)

[2.4 ACQUISITIONS 4](#_Toc137223660)

[2.5 HULL FABRICATION 4](#_Toc137223661)

[2.6 TOPSIDES FABRICATION 4](#_Toc137223662)

[2.7 INTEGRATION 5](#_Toc137223663)

[2.8 OFFSHORE 6](#_Toc137223664)

# OBJECTIVE

1. This document aims to establish a preliminary list of milestones to be contemplated by SELLER in the preparation of the Detail Project Schedule.

1. List of control milestones shall include all payment milestones (described in Exhibit VIII and XI), BUYER / SELLER interface milestones (described in Exhibit VI) and at least the description bellow (item 2).
2. The list of milestones established in this Appendix may be supplemented during the Agreement when request by BUYER or SELLER.

# MILESTONES

* 1. Milestones described in this appendix must be implemented in all PBS deliverables that have activities related to the milestone.

# MOBILIZATION

* + 1. **Mobilization of the Managing Staff**: Finish of mobilization of managers, coordinators and discipline leaders.
    2. **Functional Engineering Office:** Finish of the implementation of the Engineering office.
    3. **Functional work site:** Finish of the implementation of the work site.

# DETAIL ENGINEERING

* + 1. **Start of Detail Engineering:** Issuance of the first list of documents related to the Executive Project
    2. **Finish of Endorsement:** According with definitions in Exhibit XI.
    3. **Finish of SSOPs list:** Issuance of the Operating Sub Systems list (SSOPs) and Precedence Network, according to Exhibit IX.
    4. **Finish of P&ids issuance:** According with definitions i in Appendix 1 of Exhibit XI
    5. **Finish of Piping Isometric issue with flexibility study:** According with definitions in Exhibit XI
    6. **Finish of the superstructures and pipe-racks:** Issuance of the last document referring to the detailed design of superstructures and pipe-racks for construction.
    7. **Finish of isometric drawing issuance for piping fabrication and assembly:** Issuance of the last piping isometric drawing.
    8. **Issuance of the electrical charges list with typical functional diagram:** Issuance of the first electrical Charges list with the typical functional diagram.
    9. **Finish of the design of Typical Instrumentation Details:** Issuance of the last document referring to the typical detailing of the instruments defined in the Detail Project.
    10. **Issuance of the List of I/o and Loop Diagrams:** It characterizes the delivery of the last Detail Project document for I/O and loop diagram released for construction.
    11. **Finish of the issuance of Technical Evaluation of Mechanical Equipment:** Issuance of the last technical evaluation of mechanical equipment.
    12. **Finish of 30% Design Review of the 3D Model:** Approval of 30% Design Review and databases delivery of CAE tools with 60% maturity
    13. **Finish of 60% Design Review of the 3D Model:** According with definitions in Appendix 1 of Exhibit XI
    14. **Finish of 90% Design Review of the 3D Model:** According with definitions in Appendix 1 of Exhibit XI
    15. **Finish of the Detail Project:** Issuance of all drawings of the Detail Project for construction and other technical documents, except for As-Built, Databooks and Technical Advisory documents.
    16. **Finish of the issuance of As-Built Documentation:** Issuance of the last As-Built design.
    17. **Finish of Databook issue:** Issuance of the last Databook.

# ACQUISITIONS

* + 1. **Issuance of purchase order for Critical Equipment TAG-1…N:** Issuance of the purchase/authorization request of the Critical Equipment TAG-1 … N.
    2. **Issuance of supplier fabrication documentation for Critical Equipment Supplier TAG-1…N:** Issuance of the necessary documentation for start fabrication of Critical Equipment TAG-1 …N.
    3. **Receipt of Critical Equipment TAG-1…N in the site:** Receiving of the Critical Equipment TAG 1 …N at yard of equipment assembly.

# HULL FABRICATION

* + 1. **Start of Hull construction (Hull strike steel):** According with definitions Appendix 1 of Exhibit XI.
    2. **Hull keel laying:** According with definitions in Appendix 1 of Exhibit XI.
    3. **Hull float off:** According with definitions in Exhibit XI

# TOPSIDES FABRICATION

* + 1. **Start of Module Assembly 1...N:** Cutting of the first plate, including dimensional inspection report issuance
    2. **Finish of Module Assembly 1...N:** Finish of all assembly activities with Mechanical Completion Certificated
    3. **Finish of superstructures and pipe-racks construction:** Finish of superstructures and pipe-racks construction, with all the quality reports issued.
    4. **Start of piping fabrication:** Finish of first spools fabrication, with all quality reports issued.
    5. **Finish of piping fabrication**: Finish of last spool fabrication, with all quality reports issued.
    6. **Start of piping assembly:** Assembly of the first piping spool, including emission of dimensional inspection report and welding of this spool.
    7. **Finish piping assembly:** Finish of piping assembly, including the issuance of dimensional inspection and welding report.
    8. **Start of piping hydrotests:** Finish of the first set of 10 approved and documented hydrostatic tests.
    9. **Finish of the Critical Equipment TAG-1…N assembly:** Finish of the assembly of the Critical Equipment TAG-1...N, with all quality reports issued.
    10. **Finish of electric and Instrumentation cable trays assembly:** Finish of the assembly of electrical and instrumentation trays, when the respective quality reports are already issued.
    11. **Finish of electrical and instrumentation cables laying:** Finish of electrical and instrumentation cables laying, with the respective quality reports issued.

# INTEGRATION

* + 1. **Arrival of Hull at the Integration Shipyard:** Hull mooring at Integration Shipyard.
    2. **Arrival of each module at the Integration Shipyard:** Load out of each module at the Integration Shipyard
    3. **Lifting of the first Topsides Module:** According with definitions in Appendix 1 of Exhibit XI
    4. **Last topsides module lifting:** According with definitions in Appendix 1 of Exhibit XI
    5. **Finish of Leak test onshore:** Issuance of the latest onshore leak test report.
    6. **Start of Plant Simulation:** Start filling systems with water for Plant Simulation
    7. **Issuance of NR-10 documentation:** Issuance of all the necessary documentation complying with NR-10 standard.
    8. **Issuance of NR-13 documentation:** Issuance of all the necessary documentation complying with NR-13 standard.
    9. **Finish of Modules Integration:** Finish of all integration scope, including the issuance of quality reports.
    10. **Departure from the Integration Shipyard**: Completion of all integration activities in the Integration Shipyard.
    11. **Substantial Completion:** According with definitions in Appendix 1 of Exhibit XI

# OFFSHORE

* + 1. **Final FPSO location moored:** Finish FPSO mooring in the final location
    2. **FPSO ready for Pull-in:** FPSO Offshore ready to start the first riser Pull-in
    3. **Start of First oil:** the day of the first oil production well opening
    4. **Start of First Gas Reinjection:** the day of the first gas reinjection at well
    5. **Start of Flare Out:** the day of the Flare Out
    6. **Start of First Offloading:** the day of the first offloading operation
    7. **Start of Fuel Gas Consumption at Turbogenerator:** the day of the first turbogenerator running continuously with fuel gas
    8. **Start of Gas Treatment (CO2 Removal):** the day of the first gas treatment (CO2 Removal) operation
    9. **Start of Gas Export:** the day of the first gas export operation
    10. **Start of Water treatment:** the day of the first water treatment operation
    11. **Start of Water Injection:** the day of the first water injection at well