
WEEKLY REPORT No. 004
August 10th to 14th, 2020

PROJECTS:

PO No. TPS 20-006 TERMOPUERTOSOLO 2 - BUENAVENTURA, TRANSMISSION LINE 115kV AND POWER ELECTRICAL SUBSTATION SE TABOR

PO No. TS1 20-009 TERMOSOLO 1 - PALMIRA, TRANSMISSION LINE 230kV AND POWER ELECTRICAL SUBSTATION SE SAN MARCOS

1. PURPOSE

The purpose of this document is to report to Client Upper Management the current weekly progress related with the projects:

- TERMOSOLO 2 BUENAVENTURA, TRANSMISSION LINE 115kV AND POWER ELECTRICAL SUBSTATION SE TABOR.
- TERMOSOLO 1 PALMIRA, TRANSMISSION LINE 230kV AND POWER ELECTRICAL SUBSTATION SE SAN MARCOS.

2. ABBREVIATIONS

- TERMOPUERTO SOLO 2 – TS2
- POWER ELECTRICAL SUBSTATION TS2 – SE2
- POWER ELECTRICAL SUBSTATION TABOR 115kV, CELSIA EPSA TO RECEIVE TL2 – SE TABOR
- TERMO SOLO 1 – TS1
- POWER ELECTRICAL SUBSTATION TS1 – SE1
- POWER ELECTRICAL SUBSTATION SAN MARCOS 230kV, ISA TO RECEIVE TL1 – SE SAN MARCOS
- TRANSMISSION LINE 1 FROM TS1 TO SE SAN MARCOS – TL1
- TRANSMISSION LINE 2 FROM TS2 TO SE TABOR – TL2
- MOTA-ENGIL – ME
- SCOPE OF WORKS - SoW

3. POINTS OF ATTENTION

3.1 TS2 – SE2 – SE TABOR – BUENAVENTURA

- The TL2 current design for the power electrical capacity is 80MW. However, in the RFP for the Power Electrical EPC Package, will be included an alternative proposal for the power electrical capacity of 106MW. The objective is to check whether ME can provide an alternative bid without delay in time schedule for both (the bid and the project execution).
- For the TL2 Terminal Pole 1, ME has confirmed by email that the foundation is included in the SoW of the EPC Port Contract.

3.2 TS1 – SE1 – SE SAN MARCOS – YUMBO

- TL1 power electrical capacity will be designed to 210MW using a blue jay cable and without compromising the project execution schedule. The project team is analyzing two options (poles and towers) in order to speed up the construction schedule and simplify easements negotiations.
- Technical information regarding storage and truck loading facilities, have not been received from ME. The information is urgently needed for the environmental studies document; a meeting was scheduled on August 14th, 2020 with SeaOne, CQS, AYT and SUMED. The conclusions are discussed in final section of this report.
- Easements negotiations will start once the appraisal is finished, negotiation SoW has not been included the CQS purchase order. It is recommended to issue the purchase order with this negotiation SoW before the end of August in order to start negotiations in September.

4. CURRENT STATUS

4.1 WARTSILA EPC POWER PLANT

4.1.1 TS-2.

The email with attention points as a result of the meeting on August 7th, 2020, was submitted to SeaOne on August 11th, 2020.

The following points will be clarified with Wartsila:

- Confirm the Power Platform and substructure design requirements.
- Confirm the Power Platform and substructure requirements for the reception of the area.
- Confirm if in the 115kV power electrical substation yard side the portico, the bar, the insulators and the fittings are included to connect to the terminal pole 1 of the 115kV Transmission Line from TermoPuertoSolo to El Tabor.
- Water quality requirements, flow and pressure for the interconnection points at the intake of the process. No water treatment plant is included in the SoW.
- The SoW includes a blackstart engine. However, item H2, Utilities – Electricity source and hook up, the comments states that SeaOne should provide back power to site, this is probably when commissioning starts, it is required to confirm if Wartsila requires is backfeed power from the grid, from SE Tabor back to TS2 and auxiliaries. It is important to clarify if this is correct, or the meaning of the additional price statement is that Wartsila will use the black start engine for commissioning and the fuel will be reimbursed by Sea One.

- Laydown area is under Wartsila SoW (H1 – Roads and working area), however, it is important to understand how is it included. Wartsila suggested a barge, it implies some other aspects which need to be checked: environmental aspects, risk of sinking, it needs to be clarified. Wartsila confirmed by email an estimate about 200 pc of 40” containers plus some break bulk material. Wartsila requested a laydown area size about 10000m2 - 12000m2 next to the site of size 260m x 40m. There is not enough space at the site works.

4.1.2 TS-1.

The following points will be clarified with Wartsila:

- Water quality requirements in the intake of the water treatment plant, included in the SoW.
- Confirm the SoW in substructures.

4.2 O&M POWER PLANT CONTRACT

- It is pending to request more information about O&M strategy with SeaOne.

4.3 CQS - EASEMENT NEGOTIATION

4.3.1 TS-2.

- TL2. Poles 1 to 7. No comments under control.
- TL2. Pole 6 to 7 permit over the El Piñal Bridge and Calle 6 to be obtained with INVIAS.
- TL2. Pole 7 underground to SE Tabor. Easement permit for underground route to be obtained with INVIAS.
- TL2 inside El Tabor Power Electrical Substation permit and easement is included in the interconnection agreement.

4.3.2 TS-1.

- For the TL1 preliminary route lands status +-20 Lands:
- List of reference price will be completed by the end of August, 2020.
- Appraisal of the easement and towers/poles sites will be performed during September, 2020 by a certified appraiser by a Lonja.
- Negotiations will start once the appraisal of the easements have been finish for each land. It is estimated this activity will start on October 1st, 2020.

4.4 PERMITTING

- Permit action tracking document developed by team. It is the first draft to be populated for the Projects.
- Permits weekly meeting is scheduled every Tuesday afternoon.

4.5 GERS - TRANSMISSION LINE (TL) AND POWER ELECTRICAL SUBSTATIONS (SE)

4.5.1 SE2 + LT2 + SE TABOR.

- SE2 bay line 115kV. Wartsila scope ends in the 115kV structural steel portico. Cable, insulator and fittings to connect with Pole 1 to be included in EPC Power Electrical SoW.

- LT2 Pole 1 to 7 engineering deliverables are completed to be included in EPC Power Electrical RFP Package.
- Pole 7 - SE Tabor.
 - Pole 7 to SE Tabor, underground crossing and outcrop in SE Tabor bay are ongoing and the expected information is going to be received on August 21st, 2020.
 - SE Tabor bay and power electrical bar engineering documents are ready to be included in EPC Power Electrical RFP and final documents to be completed on August 21st, 2020.

4.5.2 SE1 + LT1 + SE SAN MARCOS 230kV.

- SE1 bay line 230kV. GERS is pending to identify technical SoW not included in WARTSILA package.
- LT1 engineering progress.
 - Lidar survey land works will start on August 20th, 2020 because of the permits in San Marcos Power Electrical Substation owned by ISA.
- LT1. Options with poles and towers being analyzed. Preliminary budget presented by GERS. Conversations with SADELEC, FEM and DIMEL confirms similar time schedule fabrication. This information to be confirmed with the quantities and weight. Construction schedule to be confirmed. No additional progress this week.
- SE San Marcos.
 - Engineering progress 0%.
- Soil studies per tower or pole need to start as soon as possible.

4.6 EPC PACKAGE 115kV (SE2 + LT2 + SE TABOR)

- Terms of reference and RFP document to be submitted to SeaOne for comments on August 16th afternoon.
- The technical chapter by GERS, social chapter by CQS and environmental chapter by AYT are ongoing and without fix delivery date.
- The goal is to submit the RFP with the technical chapter to ME on August 19th.

4.7 EPC PACKAGE 230kV (SE1 + LT1 + SE SAN MARCOS)

- Terms of reference and RFP package has not started yet. The RFP for the EPC Package 115kV will be used as a starting point.
- GERS is working in some preliminary technical information to be included in this RFP, as follows:
 - LT1.
 - Technical specifications for design, construction, electromechanical assembly and tests.
 - Loads threes for towers and poles.
 - Technical specification for insulators, fittings, phase conductor cable and guard cable.
 - Towers and poles shapes.
 - Foundations preliminary designs.
 - SE SAN MARCOS

- Technical specifications for design, construction, electromechanical assembly and tests.
- Major equipment technical specifications.

4.8 MOTA-ENGIL (ME) TS1 SUPPORT INFRASTRUCTURE

- It is pending to receive technical information and bid from ME regarding TS1 storage and truck loading facilities.

4.9 AQUA Y TERRA / AYT – ENVIRONMENTAL LICENSING

4.9.1 TS-2

- AYT submitted on July, the project description and construction methods document to be included in the environmental studies. It is pending to give AYT comments of this document. This point will be closed next week.
- For the environmental license of the last 300m of TL2, technical documents are in progress and are going to be completed before August 21st.
- The EIA for the not licensed section of TL2 will be submitted to the environmental authority on September 24th approximately.

4.9.2 TS-1

On August 14th a meeting was held with SeaOne, AYT, CQS and SUMED, the conclusions are:

- Estimated Water Balance flow volumes:
 - 1 m3/hr is process plant (considered water treatment plant capacity 1m3/hr from Wartsila SoW, however water balance required is 0,046m3/hr).
 - 0,3 m3/hr sanitary services.
 - 0,3 m3/hr Other infrastructure.
 - 5 m3/hr Firefighting system not used constantly just to refill potential consumption.
- It will be considered to collect rain water.
- No deep water wells will be considered because of the small amount water demand and the higher cost of this.
- Sources of water:
 - Rain Water.
 - Water from Rio Cauca. Intake and discharge.
 - Water trucks supply.
- Construction
 - ME confirmed in writing that a concrete plant is not required for the project.
 - ME confirmed no catering camp and no accommodation will be located at the site works because it is located near Yumbo. The camp will include the offices and storage.