

25<sup>th</sup> July 2024

Energy Fiji Limited

Suva

**RE: Energy Fiji Limited**

**MR 247/2024 Re-installation and Commissioning of EFL's Wainisavulevu Rubber Dam.**

**Notice To Tenderers (NTT) No: 1**

This is a notification to tenderers on the additional information and updated been uploaded.

- Updated Scope of Works
- Updated Price Schedule
- Updated Compliance Checklist Declaration

Tenderers are to acknowledge this Notice to Tenderers No 1 with their tender submission.

Kind Regards



**Epeli Malo**  
**General Manager Generation**  
Energy Fiji Limited  
Mobile: 9991908

## 4 SCOPE OF WORK

The Contractor shall provide all labour, tools and equipment necessary for installation and commissioning of the EFL's Wainisavulevu Rubber Dam.

1. Anchor Bolts
  - a. Removal of old anchor bolts with minimal damage to the concrete surface along the anchor bolt centerline.
  - b. Supply of Stainless steel anchor bolts:
    - i. 217 qty x M30 x 450mm.
    - ii. 56 qty x M20 x 300mm.
  - c. Supply of Two Part Epoxy for Embedment & Self-levelling grout (Please forward data sheet for products chosen).
  - d. Installation of new anchor bolts according to anchor bolt template and manual drawings.
    - i. 217 qty x M30 bolts embedded in epoxy, approximately  $\text{Ø}35\text{mm} \times 330\text{mm}$  deep. Torqued to 400ft-lbs.
    - ii. 56 qty x M20 bolts embedded in epoxy, approximately  $\text{Ø}25\text{mm} \times 215\text{mm}$  deep. Torqued to 200ft-lbs.
  - e. For concrete surface finishing along M30 anchor bolts centerline. Any high spots should be ground flat and low spots should be filled with self-levelling grout.
2. Air supply piping works from control building to gate system:
  - a. Supply of 1 ½" (40mm) Schedule 40 seamless stainless steel pipes and fittings. Total quantity of fittings (elbows, unions, etc.) to be confirmed during site visit.
  - b. Fabrication of 1 ½" (40mm) (Schedule 40 stainless steel pipes and fittings for
    - i. Single pipeline section, Gates 1-2.
      1. 2 qty x Stainless steel Reducing Tees - ½" x 1 ½" x 1 ½".
      2. 1 qty x Stainless steel Reducing nipple - 1 ½" x ¼".
      3. 1 qty x ¼" Stainless steel ball valve – PN10 (Purge valve).
    - ii. Double pipeline section, Gates 3-14.
      1. 24 qty x Stainless steel Reducing Tees - ½" x 1 ½" x 1 ½".
      2. 2 qty x Stainless steel Reducing nipple - 1 ½" x ¼".
      3. 2 qty x ¼" Stainless steel ball valve – PN10 (Purge valve).
    - iii. The location of the Purge valves and inclination of pipes will be confirmed during site visit.
    - iv. Other fittings for 1 ½" Air Supply pipes must be noted during site visit once pipe route is confirmed.
    - v. Supply and installation of Unistrut pipe supports. Secure Unistrut to concrete using M12 stainless steel expansion anchors. Note: The pipe supports and unistrut mounts that will be mounted on the weir crest must be stainless steel, whereas the remaining portions can be galvanized steel.
    - vi. The pipes are to be welded, along with union joints at selected locations for ease of assembly and maintenance.
    - vii. Carryout Pickling of full pipeline.
    - viii. Carryout Pressure testing of full pipeline according to ASME B31 or equivalent standards. Provide certificate and warranty (min 2 years).
  - c. Supply and installation of hoses and fittings from ½" Brass air fitting on Air Bladder to the ½" reducing tees from Air supply lines.
    - i. Single pipeline section, Gates 1-2.

1. 2 qty x 1/2" 2-wire reinforced rubber hoses x Approx. 1800mm. S/S BSP (60deg cone) female swivel hose fittings: 1 end compact or short 90 deg, 1 end straight.
  2. 2 qty x 1/2" S/S BSP Nipple.
- ii. Double pipeline section, Gates 3-14.
1. 12 qty x 1/2" 2-wire reinforced rubber hoses x Approx. 1600mm. S/S BSP (60deg cone) female swivel hose fittings: 1 end-compact or short 90 deg, 1 end-straight.
  2. 24 qty x 1/2" S/S braided hose x Approx. 600mm. S/S BSP (60deg cone) female swivel hose fittings: 1 end 90 deg, 1 end straight.
  3. 12 qty x S/S male tee 1/2" x 1/2" x 1/2".
  4. 24 qty x 1/2" S/S inline check valve – PN10.
  5. 48 qty x 1/2" S/S BSP nipple.
- iii. Other fittings for 1/2" hoses must be confirmed during site visit.

**Note:**

1. All detailed drawings will be provided during site visit.
2. Test pressure and test procedure will be provided during site visit.
3. The route and total length of exterior piping and quantity of fittings to be confirmed during site visit.
4. Concrete to be flat within 3mm for 200mm 'Upstream' and 'Downstream' of Anchor bolt centerline. Concrete along the Anchor bolt centerline to be flat within 3mm in the 'Abutment-to-Abutment' direction and be level within 6mm in 'Abutment-to-Abutment; direction.
5. Surface mounted air supply pipes, electrical conduit shall be supported using unistrut mounts, pipe hangers, and stainless steel expansion anchors.