



Commonwealth
of Dominica



Dominica Geothermal Risk Mitigation Project (DGRMP II)

Pre-bid Meeting and Field Visit

5th December 2023

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Background

The island of Dominica, (area: 750 km²; population: 72,000) is located in the Eastern Caribbean chain of islands.

Its **volcanic** nature provides a very **rugged terrain** and is **frequently impacted by Atlantic hurricanes and storms**.



Background

- Dominica aims to achieve 100% electricity generation from renewables by 2030 – primarily based on existing hydro and new geothermal sources
- A new transmission network is required
 - Existing 11 kV network lacks adequate capacity or resilience
 - Hydro and Geothermal generation plants will be concentrated in the Roseau Valley
 - Significant load growth, including a new airport and hotels, in progress in the North
- The new network will operate at **69 kV and 33 kV levels**

Background (cont'd)

- This DGRMP II Project represents the first phase of this new transmission network (~50%)
- A 10 MW geothermal power plant will be constructed during 2024/2025 in Laudat
 - The power plant developer will construct the geothermal power plant substation
 - There is some shared usage of project lands in the Laudat area
 - Power for the geothermal power plant commissioning tests, and for black start, will be provided from Laudat Hydro Station (via 11 kV connection)
 - Full commercial operations of the geothermal power plant will require Fond Cole to be connected to the geothermal power plant (33 kV or 69 kV)

Project Scope

1. Construction of three new electrical substations:

- At Trafalgar hydroelectric power station – 33/2.2 kV
- At Padu hydroelectric power station – 33/11 kV
- At Fond Colé diesel power station – 69/33/11 kV

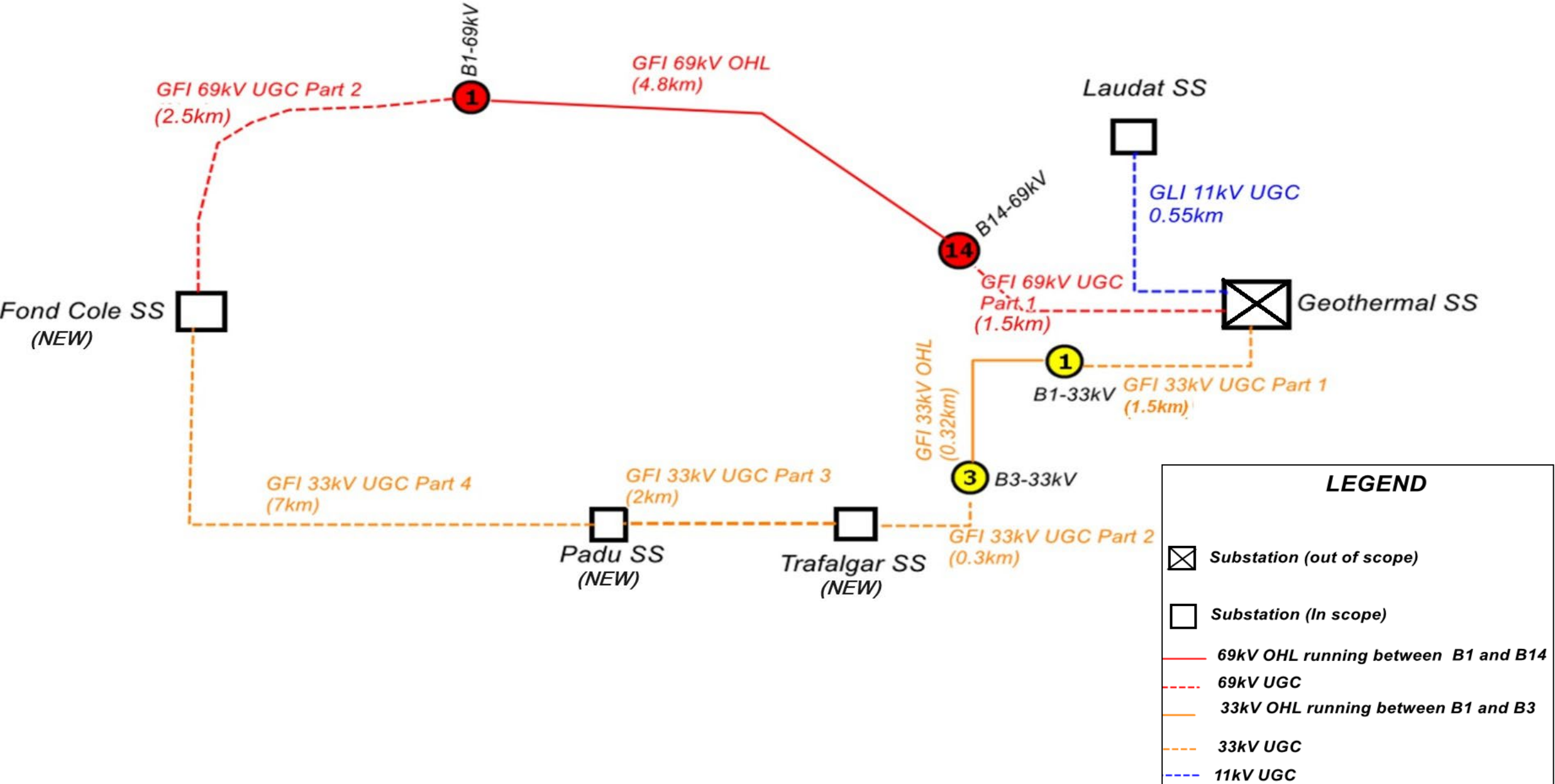
2. Connection of the existing Laudat hydropower station (11 kV) to the Geothermal substation (69/33/11 kV)

Elements of New Transmission Network (cont'd)

3. Construction of the following lines :

- **UG cable link at 11 kV** → Geothermal substation (69/33/11 kV) to the Laudat substation, (~0.5 km)
- **UG cable link at 33 kV** → From the Geothermal substation (69/33/11 kV) to the Fond Cole SS (69/33/11 kV), with a deviation to Trafalgar SS and Padu SS (~10.7 km of UGC and ~0.3 km of OHL)
- **OHL/UGC link at 69 kV** → From Geothermal substation (69/33/11 kV) to the Fond Cole SS (~4 km of UGC and ~4.8 km of OHL)

Configuration of the New Transmission Network



Location of the New Transmission Network



— 69 kV OHL
— 69 kV UGC

— 33 kV UGC
— 33 kV OHL

◆ Substation

69, 33 and 11 kV UGC connections to Geothermal Power Plant



33 kV line – areas of particular interest



GFI 69 kV - OHL Section (bend points)



Laudat Power Station- 11 kV

The new 11 kV cable will cross the road and come inside the power station building from the back side.



Aerial view of Laudat power station and 11 kV UGC



Back side of the Laudat power station building

Laudat Power Station

The 11 kV underground cable coming from Geothermal substation will be connected to the existing 11 kV switchgear cabinet used now for the connection “TLI link” (Trafalgar – Laudat Interconnector).

A new FO cable will be installed to ensure the communication between the Geothermal substation and the Laudat power station.



Existing 11kV switchgear in Laudat

Trafalgar Substation site- 33/2.2 kV

The available area is located nearby the existing power station.

11 kV poles will be relocated by DOMLEC before site handover.



Trafalgar power station and new SS location



Aerial view of Trafalgar power station and new SS location

Trafalgar Substation

The 2.2 kV cabinets used to supply the existing 2.2/11 kV power transformers will be routed to supply both new 2.2/33 kV transformers.

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Existing 2.2kV switchgear in Trafalgar

Padu Substation site- 33/11 kV

The available area is located nearby the existing power station.



Padu Substation

Two existing 11 kV cabinets will be repurposed for connection to the new 33/ 11 kV power transformers.



Existing 11 kV switchgear in Padu

Fond Colé Substation site- 69/33/11 kV



NB: 11 kV poles and a fire hydrant will be removed before site handover.

Fond Colé Substation

Due to the limited available area, the new Fond Colé substation may be a two-storey building.

The existing 11 kV switchgear must be extended for interconnection to the new 11 kV switchgear (in new substation building)



Existing 11 kV switchgear in Fond Colé

Procurement - Key Elements

- Lump sum contract
- Quantities in Price Schedule are indicative
- **Alternative bids will not be accepted** [ITB- 13.1]
- **Key dates** *(subject to any future amendments)*
 - Cut off time for questions is 15th December 2023 (14 days prior to the bid submission deadline) [ITB 7.1]
 - Bid opening date is **29 December 2023 at 1400 AST (GMT-4)**. [ITB 26.1]
 - Bid submission –Bidders shall deliver two separate Parts, the Technical Part and the Financial Part at the Date and Time specified at **ITB 23.1**. Each Part of the Bid shall be submitted in a sealed envelope containing the original paper-based Bid with a PDF version of each Part in a USB drive.

NOTE: An amendment will be submitted shortly containing missing files for UGC price schedules and several annexes

Procurement - Key Elements (cont'd)

- **Time Schedule (refer to Annex 0)**

- Completion of 11 kV and 33 kV components- (early partial completion of project requirement)- 18 months from effective date of contract. (Part II Section A, 2.2.2)
- Completion of remainder of contract- 30 months from effective date of contract.

Video Presentation

Discussion | Questions

Please use the format below to submit your questions to DGDC

No.	RFB Reference	Bidder's Question

Thank You!



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