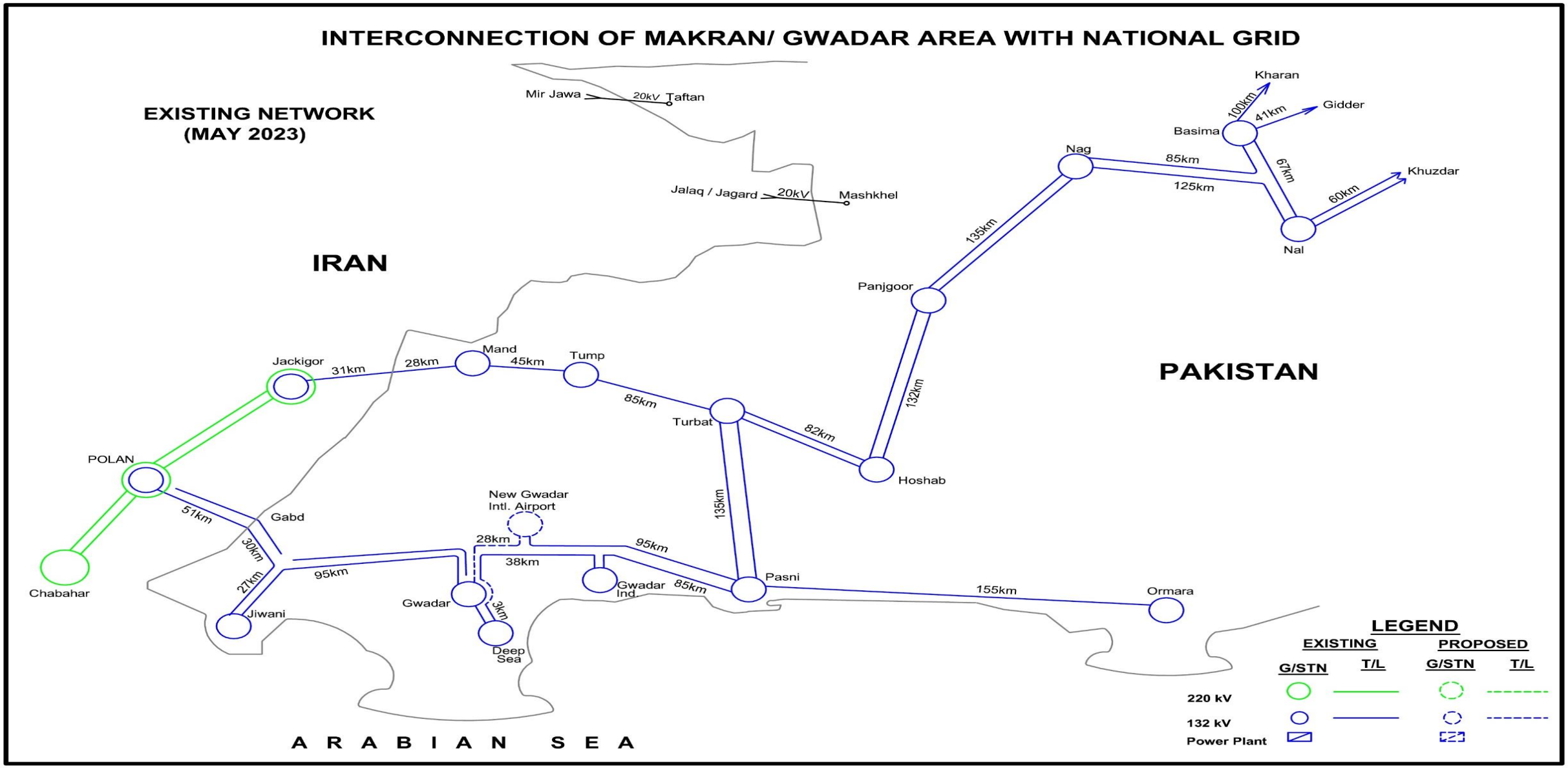
Power Supply Options for Makran/Gwadar
Short to Medium Scenarios

1. 70-90 MW import from Iran on the existing 132 kV T/Line from Jackigoor (Iran) to Mand (Gwadar)
    - Operational since 2003

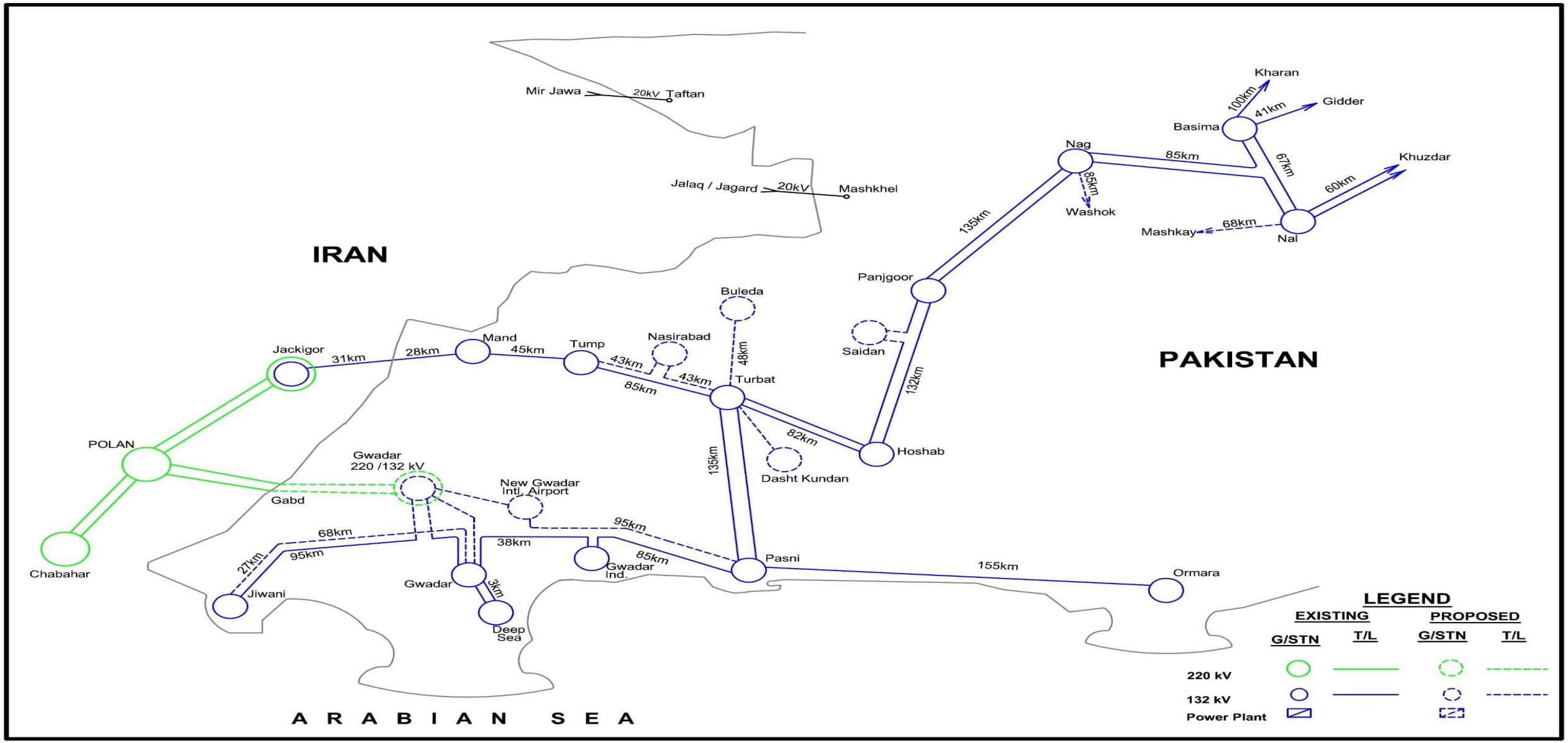
2. 100 MW Additional Import from Iran
    - 51 km of T/Line from Polan (Iran) to Pak-Iran border - completed
    - Interim 132 kV supply link has been completed in Feb. 2023 – 30.3 km, 132 kV T/Line from Pak-Iran border (Gabd) to Gwadar-Jiwani T/Line
    - Permanent 220 kV supply link shall be completed after funding arrangement from EDBI of Iran and completion of Gwadar 220kV G/Station and remaining 45 km T/Line (18 months construction time).
3. 70-80 MW by linking 132 kV network of Makran/Gwadar with national grid
    - 132 kV transmission lines (Basima - Nal - Nag - Panjgoor) completed by QESCO
    - 160 MVA, 220/132 kV T/F at Khuzdar shall be installed by NTDC

Total Supply for Makran/Gwadar = 250 – 260 MW

Existing Makran/Gwadar Network
With Additional Power Import from 132 kV Supply Arrangement with Iran



Existing/Planned Network of Makran/Gwadar - 132 kV Connection with National Grid and Additional Power Import from 220kV Permanent Supply Arrangement with Iran

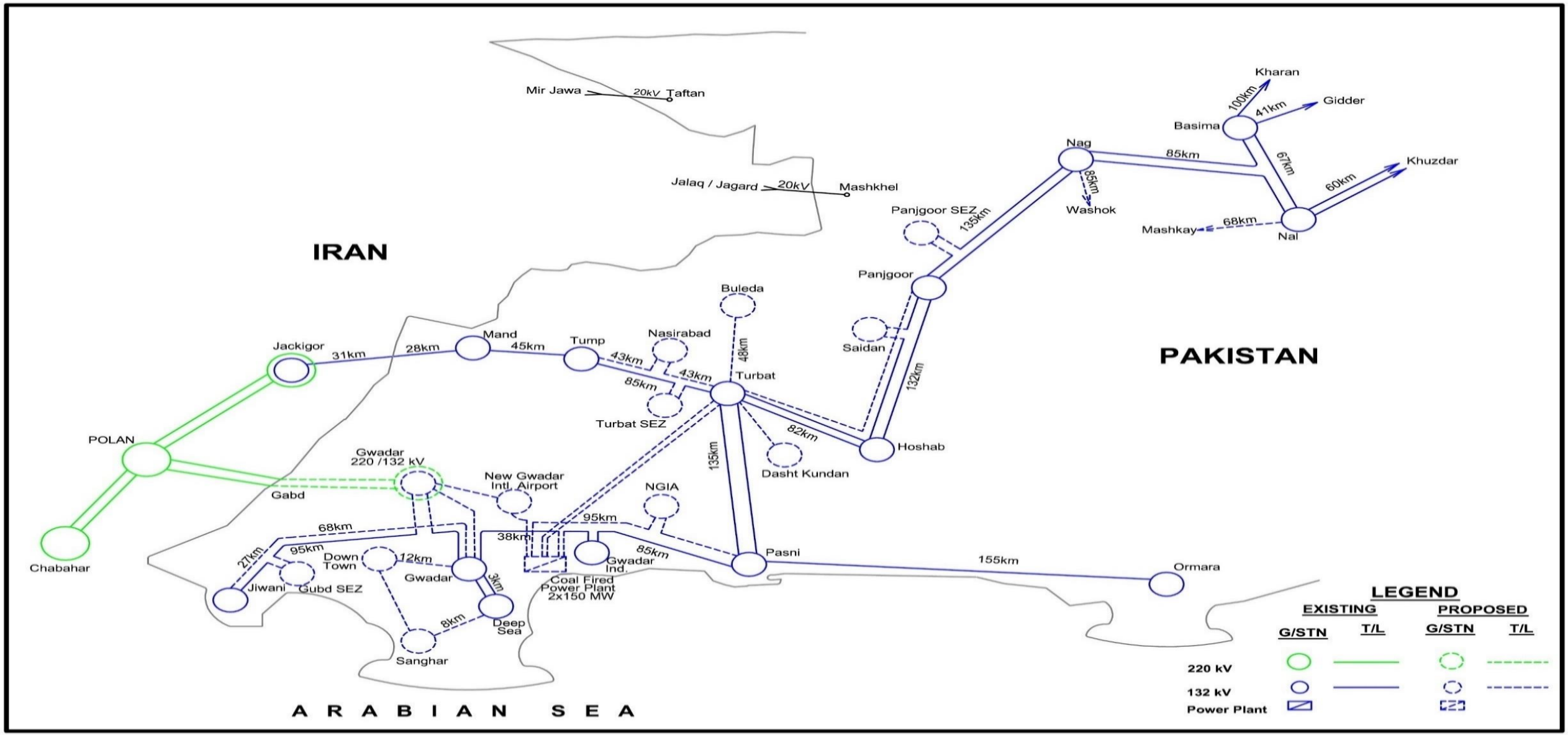


Power Supply Options for Makran/Gwadar
Medim Term Scenario

300 MW Coal Fired Power Project (CFPP) at Gwadar under CPEC Framework

- Imported coal option
- GoP Target CoD: Dec. 2025
- Latest CoD to be intimated by PPIB
- Power Evacuation shall be through 132 kV T/Lines to be built by QESCO

Addition of 300 MW Coal Plant at Gwadar



Power Supply Options for Makran/Gwadar
Long Term Scenario

Bulk Supply from National Grid to Makran/Gwadar Network

- 500 kV T/Line from Southern NTDC network along coastal highway via Ormara to Gwadar along with 132 kV network expansion in Makan/Gwadar network.
- Two-phase development may be adopted in consideration of the load growth in Makran-Gwadar network:

  Phase-1: China-Hub CFPP – Ormara 500 kV T/Line (approx. 335 km)

  Phase-2: Ormara – Gwadar 500 kV T/Line (approx. 260 km)

- Reactive power compensation for voltage support at Ormara and Gwadar
- Total power Supply Capacity = 900 – 1000 MW

Bulk Supply Option from National Grid
Hub – Ormara – Gwadar 500 kV Link