Non-Technical Summary (NTS)

Mafraq 700 MW Combined-Cycle Gas Turbine (CCGT) Thermal Power Plant Project in Jordan

REV-0

September 2026

Issue and Revision Record:

Template Code		**QF-PM-01-15**	**Template Revision No.**	**REV-0**
Version	**Date**	**Description**	**Prepared By**	**Approved by**
REV 0	Sept 2026	Draft NTS Report	ECO Consult	Ibrahim Masri / Project Manager

Disclaimer:

This report should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authority of Etihad Water and Electricity (EtihadWE) (the Developer) being obtained. ECO Consult accepts no responsibility or liability for the consequence of this document being used for a purpose other than the purposes for which it was commissioned.

This report is confidential to the Developer, and ECO Consult accepts no responsibility of whatsoever nature to third parties to whom this Report, or any part thereof, is made known. Any such party relies upon this report at its own risk.

TABLE OF CONTENTS

Table of Contents ..... **ii**
List of Figures ..... **iii**
1. Introduction **4**
1.1 Background 4
2. Project Description **6**
2.1 Project Setting 6
2.2 Project Components 8
2.2.1 Associated Facilities 11
2.3 Workforce Requirements 14
2.4 Project Phases 15
2.5 Need for the Project and Alternatives 15
3. Summary of Environmental and Social Baseline Conditions and Impacts **17**
3.1 Introduction 17
3.2 Environmental and Social Baseline Conditions and Impacts 17
3.2.1 Landscape and Visual 17
3.2.2 Land Use 18
3.2.3 Stakeholder Engagement 19
3.2.4 Air Quality and Dust 20
3.2.5 Noise and Vibration 20
3.2.6 Climate Change Risk Assessment 21
3.2.7 Biodiversity 22
3.2.8 Geology, Hydrology, and Hydrogeology 23
3.2.9 Archaeology and Cultural Heritage 24
3.2.10 Socio-economic Conditions, Local Employment and Local Content 24
3.2.11 Infrastructure and Utilities 25
3.2.12 Community Health, Safety and Security 25
3.2.13 Labor Management, Working Conditions and Occupational Health and Safety 26
3.2.14 Gender-Based Violence, Sexual Exploitation, Abuse and Harassment 27
3.2.15 Cumulative and Transboundary Impacts 27
3.2.16 Overall Residual Impact Summary 28
4. Environmental and Social Management and Monitoring **29**
5. Associated Facilities **30**
6. Further Information and Contact Details **32**

LIST OF FIGURES

Figure 1: Administrative Location of the Project in Jordan 6
Figure 2: Project Site 7
Figure 3: Location of Local Communities in Vicinity of Project Site 8
Figure 4: Overview of the CCGT Process 9
Figure 5: Primary Power Generation Components 10
Figure 6: Components of an OHTL 12
Figure 7: Project Site and Associated Facilities 13
Figure 8: Gas Pipeline 13
Figure 9: Water Pipeline 14
Figure 10: Project Site and Associated Facilities 30

1. INTRODUCTION

1.1 Background

Jordan's energy sector is considered vital within the Hashemite Kingdom of Jordan, supporting economic growth and sustainable development. However, the sector continues to face key structural challenges, including limited local energy resources and a high reliance on imported energy, including that for electricity generation. Acknowledging this, Jordan adopted a policy direction focused on energy transition through diversifying sources, developing conventional and renewable energy resources, improving energy efficiency, and encouraging private sector investment in energy infrastructure.

In the context of energy transition efforts, the Government of Jordan (GoJ) has announced a comprehensive portfolio of investments that includes more than 200 MW of renewable energy projects till 2029 and approximately 1,400 MW of new CCGT capacity till 2030.

These investments are incorporated within the "Jordan Economic Modernization Vision" as a key pillar for achieving sustainable development goals, and reducing emissions targets, while meeting the accelerated demand growth and ensuring the electricity system's reliability and resilience standards. Also, these projects are part of National Electric Power Company's (NEPCO) "Master Plan 2024–2035" and Ministry of Energy and Mineral Resources' (MEMR) "Jordan Energy Strategy" as part of a balanced expansion portfolio.

Taking the above into account, CCGT forms an integral part of the expansion portfolio as required within the Energy Strategy and Master Plan. CCGT projects serve as a unit of an integrated system of generation and storage plants to maintain a secure and reliable electricity system while accommodating a rapidly increasing share of variable renewable generation.

In alignment with policy objectives set out above, the GoJ has approved the progression of a CCGT Power Plant Project within the framework of the Seventh Independent Power Producer Project (IPP7). MEMR progressed with the implementation of the framework of IPP7, through a 700 MW CCGT Power Plant Project, to be located in Mafraq District, Jordan (hereafter referred to as the "**Project**"). The Project will be developed under a Build, Own and Operate (BOO) model for a term of 25 years from Phase 1 COD (Simple Cycle), equating to approximately 24 years from the full Plant PCOD (Combined Cycle).

The implementation framework entailed obtaining proposals from various international developers. Etihad Development Company (EDC), the development arm of Etihad Water and Electricity (EtihadWE) (hereafter referred to as the "**Developer**"), submitted a direct proposal on 21 July 2025, and on 5 November 2025 the Council of Ministers Resolution No. 5574 was issued approving the direct proposal submitted by the Developer. Pursuant to the resolution, the Developer was invited to participate in a direct negotiation for the development of the Project with NEPCO (hereafter referred to as the "**Off-Taker**") and the GoJ represented by MEMR. The Developer has signed the Power Purchase Agreement (PPA), Implementation Agreement (IA), Land Lease Agreement (LLA), and Water Supply Agreement (WSA), (collectively the "**Project Agreements**") on 6 May 2026.

The Project Agreements were signed with the following parties:

- PPA – signed with NEPCO
- IA – signed with MEMR
- LLA – signed with the Department of Lands and Survey (DLS)

- WSA – signed with the Water Authority of Jordan (WAJ) and Yarmouk Water Company (YWC)

This Non-Technical Summary (NTS) explains the main findings of the ESIA in accessible language. It describes the Project, the alternatives considered, the existing environmental and social conditions, the main potential benefits and adverse effects, the proposed mitigation and monitoring measures, and the arrangements for stakeholder engagement and grievance management.

The Project document package also includes a Stakeholder Engagement Plan and a Land Acquisition Framework. The Stakeholder Engagement Plan sets out how affected people, communities, public authorities and other interested parties will continue to receive information and participate in consultation, and it includes a grievance mechanism. The Land Acquisition Framework establishes the principles that will apply to permanent and temporary land requirements for the associated transmission line and connection pipelines, including compensation and livelihood restoration.

2. PROJECT DESCRIPTION

2.1 Project Setting

The Project is located in Mafraq Governorate, approximately 55 km northeast of Amman. Administratively, the Project site lies in the Northwestern Badia District and Hosha Sub-District.

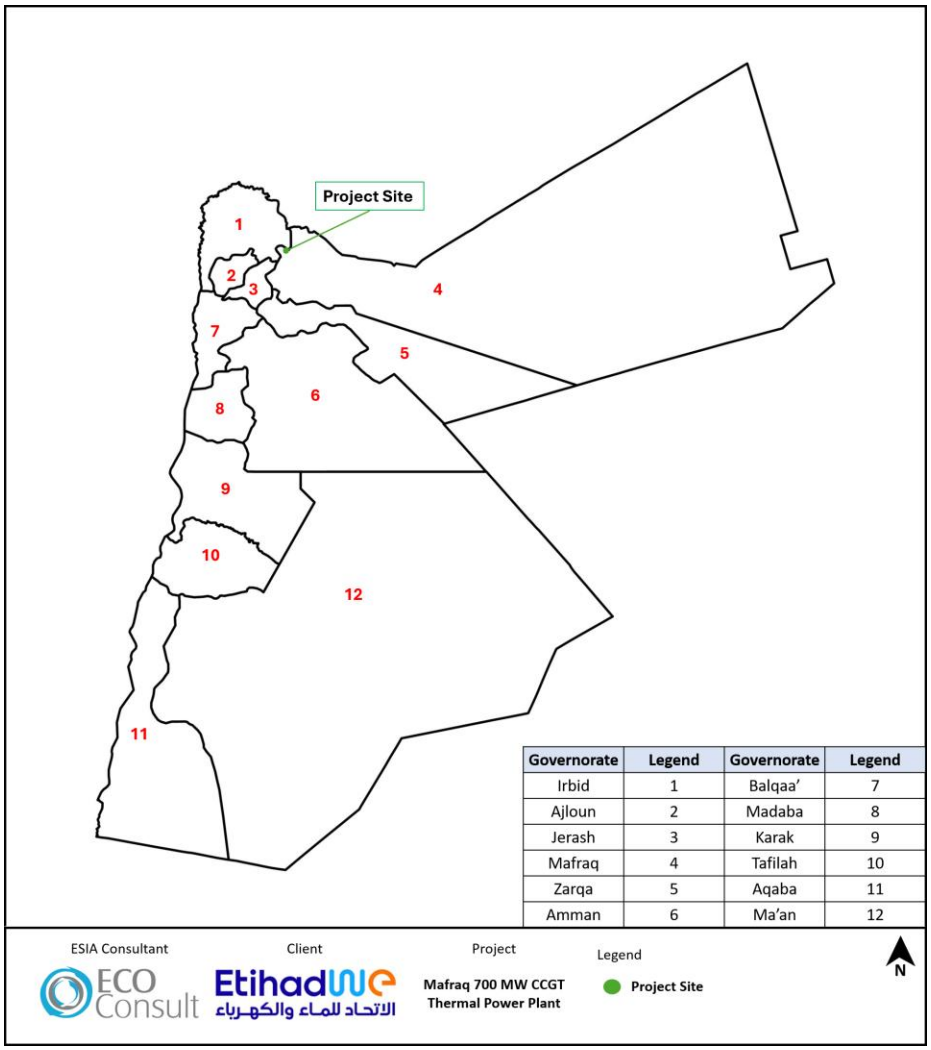

Figure 1: Administrative Location of the Project in Jordan

The mapped Project area is approximately 0.45 km². It comprises about 0.25 km² for the power plant, approximately 0.07 km² for the new substation and approximately 0.13 km² for a temporary construction laydown area. The power plant site is on State-owned land. A Prime Ministry decision (No. 9/6/1/8651 of 16 April 2025) allocated 300 dunums for the CCGT development.

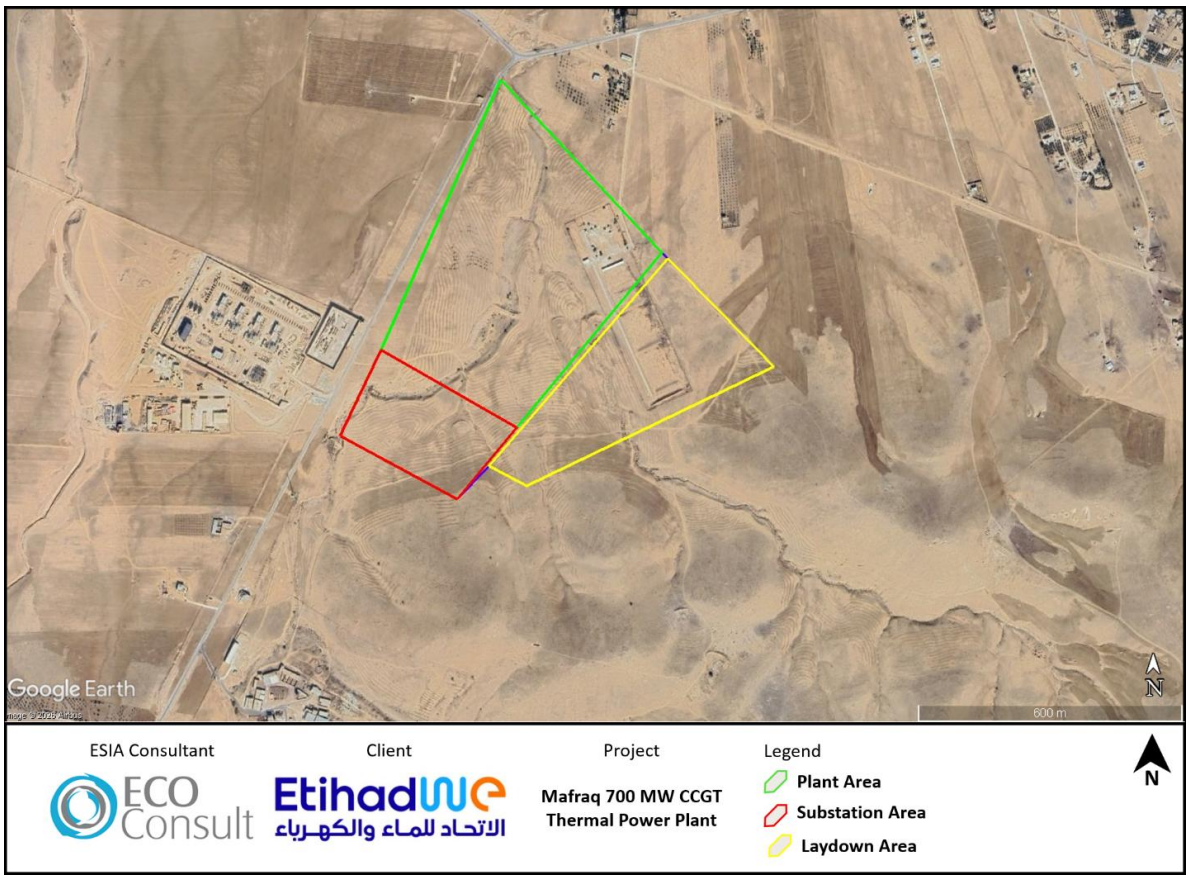

Figure 2: Project Site

Project Affected Communities (PACs) or local communities comprise those settlements in the vicinity of the Project which may be affected by the Project activities, i.e., within the Project Area of Influence.

Those communities closest to the Project site are located within Northwestern Badia District (as it is the District within which the Project site is located). This includes the following:

- Faa' located around 0.76 km northeast of the Project site with a population of 3,076.
- Al-Harsh located around 1 km northwest of the Project site with a population of 1,833.
- Al-Khanasri located around 1.2 km southwest of the Project site with a population of 1,033.
- Buraiqa located around 3.5 km northwest of the Project site with a population of 1,437.
- Hosha located around 3.83 km northeast of the Project site with a population of 3,029.

The communities located in Qasabet AlMafraq District, which is the closest District to the Project site, comprise:

- Umm Al Lulu located around 2.76 km southeast of the Project site.
- Deir Al Waraq located around 3.1 km south-southwest of the Project site.
- Manshyet Bani Hassan located around 3.2 km south-southeast of the Project site.

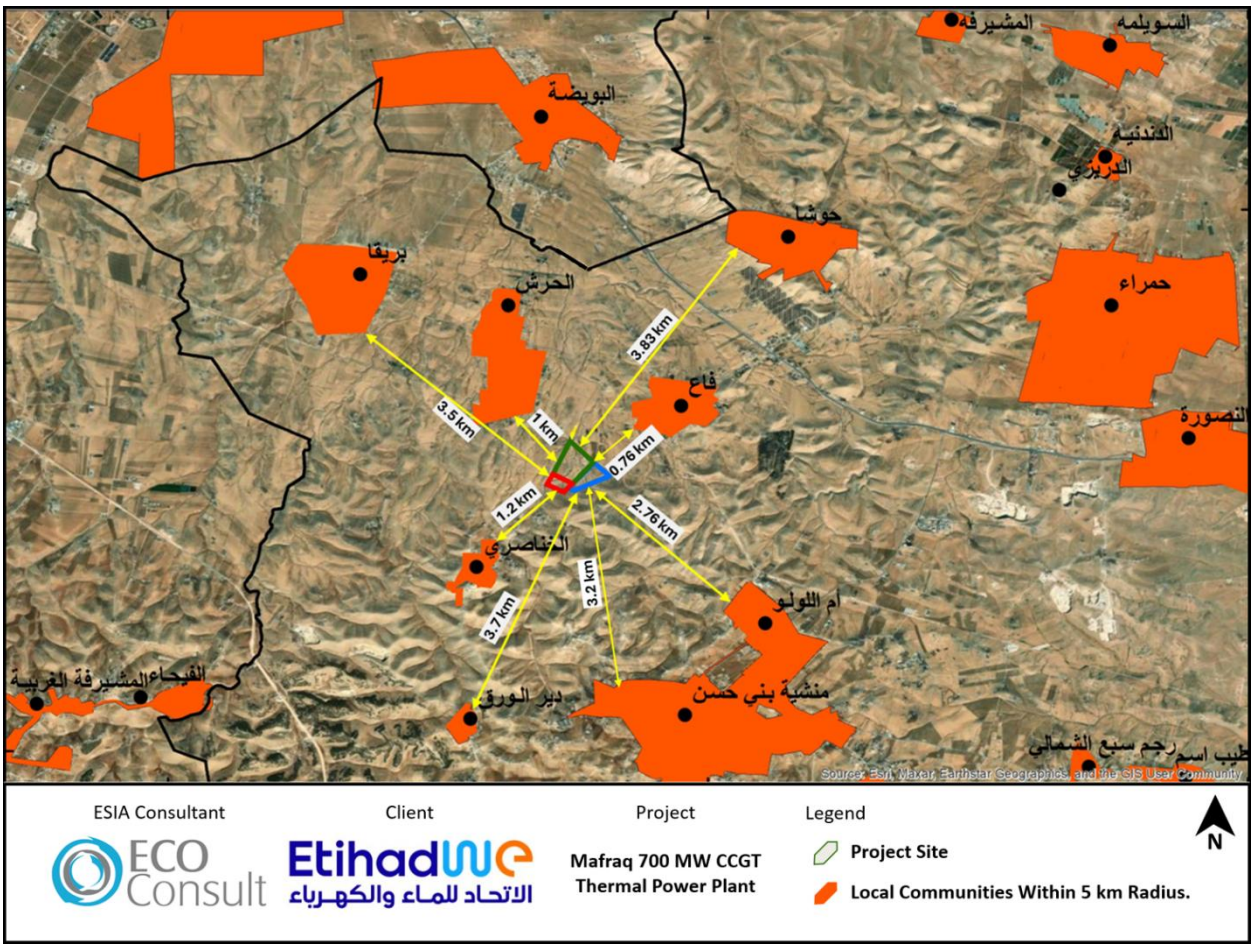

Figure 3: Location of Local Communities in Vicinity of Project Site

The Project site is partly within the Khanasri Grazing Reserve. Consultation with the Ministry of Agriculture indicated that the relevant land is fenced and managed, external grazing is not permitted, the area was last planted during 2019–2020, and no individual grazing user is expected to be displaced. The Ministry of Agriculture raised no objection to the Project. Nevertheless, the status of the reserve and any vegetation-management obligations will continue to be considered in detailed design and reinstatement.

A military shooting range partly overlaps the site. The range is expected to be relocated and the land cleared and remediated by the end of 2026. Before construction begins, the Developer will require formal confirmation that the land has been made safe, including an unexploded-ordnance and contamination assessment and any necessary clearance or remediation.

A planned railway corridor passes south of the Project. Permanent plant components have been arranged outside the 100 m railway buffer, although parts of the temporary laydown area, substation and transmission corridor interact with the wider planning corridor. Continued coordination with the Ministry of Transport and the relevant railway authority is required so that access, safety and future railway requirements are protected.

2.2 Project Components

A combined-cycle gas turbine power plant generates electricity in two linked stages. First, natural gas is burned in gas turbines to produce electricity. The hot exhaust gases are then passed through heat recovery steam generators to produce steam, which drives a separate steam turbine and generates additional

electricity without burning the same quantity of fuel again. This combined-cycle arrangement is more efficient than operating the gas turbines alone.

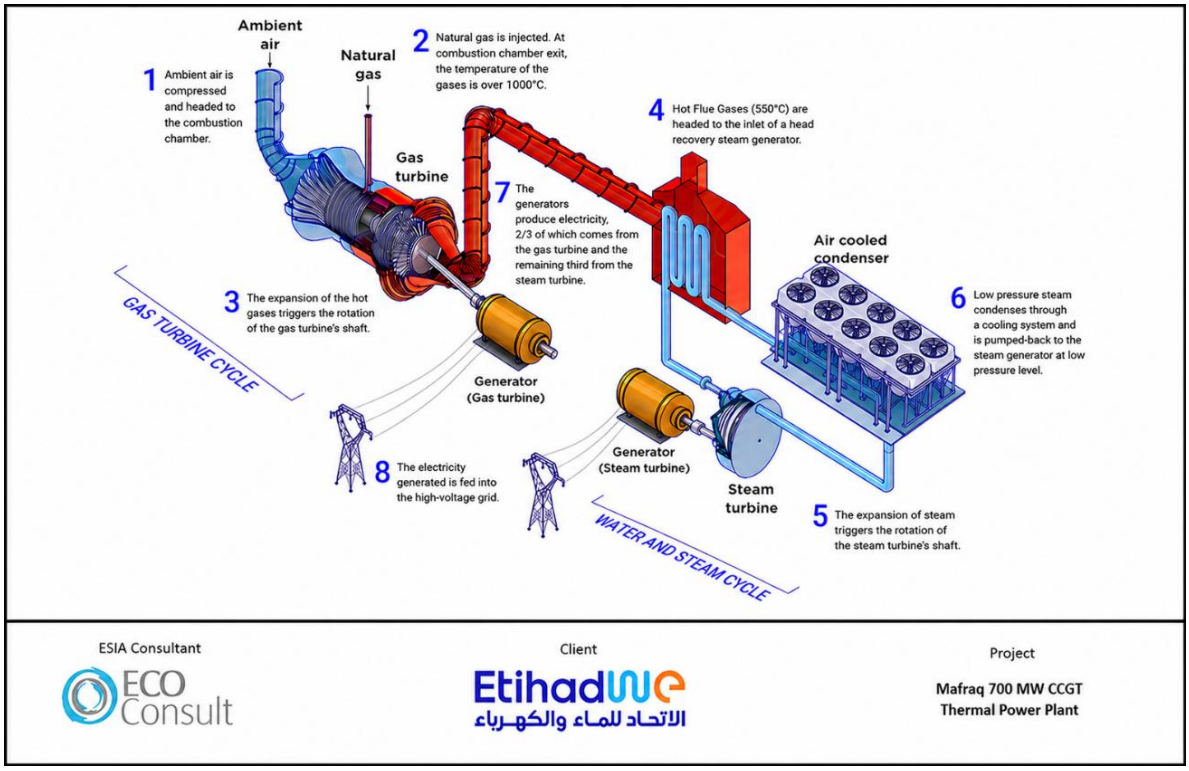

Figure 4: Overview of the CCGT Process

The main power-generation components are:

- Three (3) combustion turbine generators. Natural gas will be the routine fuel, with distillate fuel oil available only as a backup source.
- Three (3) heat recovery steam generators, each receiving exhaust from one gas turbine and connected to a main stack.
- One (1) steam turbine generator, which uses steam produced by the heat recovery steam generators.
- An air-cooled condenser, which condenses steam after it passes through the steam turbine and greatly reduces water demand compared with a wet-cooling system.
- A new on-site electrical substation that will transform the generated electricity to the voltage required for transmission to the national grid.

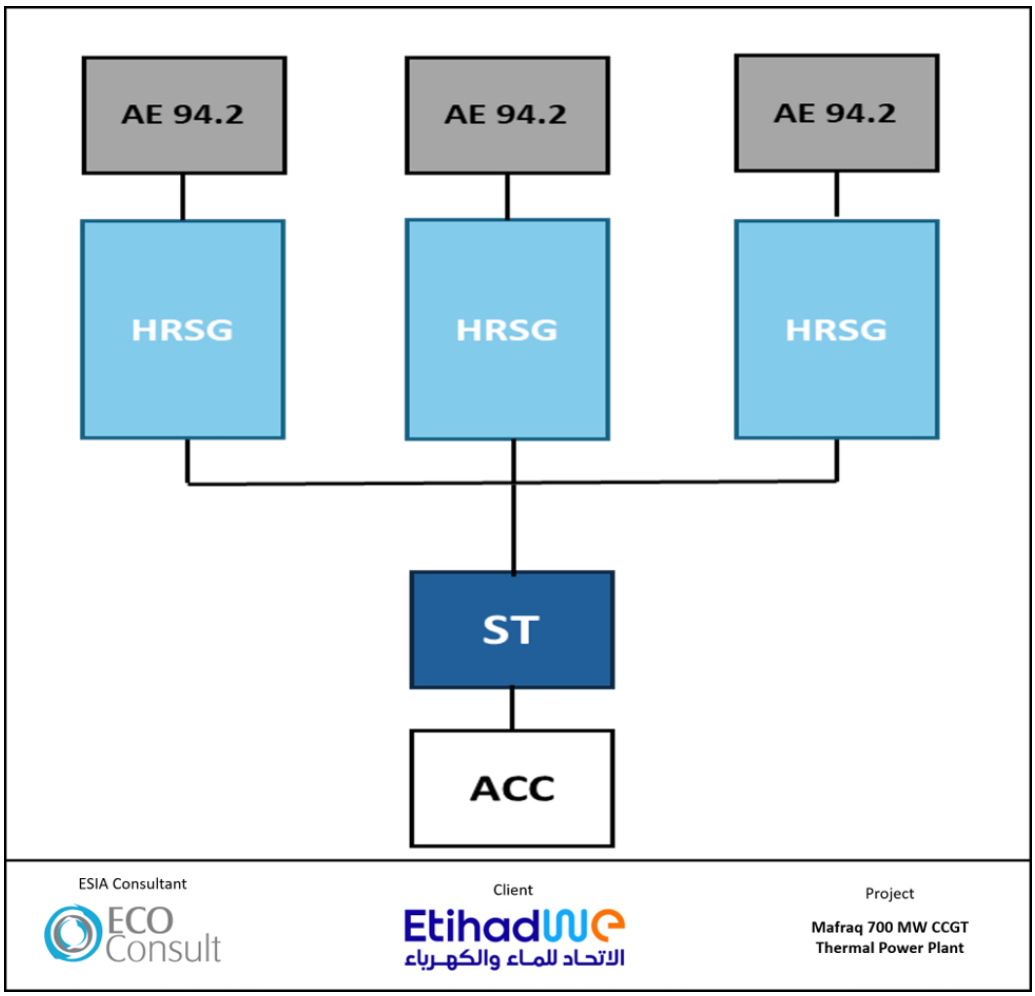

Figure 5: Primary Power Generation Components

In addition to the main power generation components, the Project will include several supporting systems essential for its operation. These are described in detail below, and their relationship to the primary power generation components is illustrated in the figure below.

- Feedwater System
- Closed Cooling Water System
- Fogging & High Fogging Systems
- Water Treatment Plant
- Wastewater Handling Facilities, which comprise the following:
  - Wastewater Treatment Plant
  - Evaporation Pond
- Natural Gas System
- Backup Fuel System
- Black Start Diesel Generator

- Administrative and operational buildings, workshops, warehouses, internal roads, parking, security fencing and landscaping.

2.2.1 Associated Facilities

Associated Facilities are facilities that would not have been constructed or expanded if the Project did not exist and without which the Project would not be viable. The Project will rely on several Associated Facilities that are required to support its operation, including fuel supply infrastructure, electrical interconnection facilities, and water supply systems.

- Overhead Transmission Line (OHTL) and Substation

NEPCO will be responsible for the off-site electrical interconnection required to connect the Project to the national grid. The Project will be connected directly to the internal substation that will be constructed and operated by NEPCO, which will serve as the power evacuation point. NEPCO will be responsible for the design, construction, operation, and maintenance of the substation and associated interconnection facilities. The location of the substation and current indicative OHTL route is shown in Figure 7 below.

Total length of the OHTL is 6.8 km. The main component of the OHTL is the transmission tower. There will be a total of 208 towers, each will be a three (3) phase steel beam tower, which will transport the electricity to the High Voltage National Grid. The typical structure of the tower is presented in the figure below. Each transmission tower will consist of the following:

- **Foundations:** each tower will be fixed and bolted to the ground through reinforced concrete foundations. There will be four (4) foundations for each tower. The footprint of individual towers is likely to range from approximately 15 m × 15 m to 30 m × 30 m, depending on the tower type and location;
- **Steel structure:** the foundations will support the steel structure that will carry the conductors, cross-arms, insulators and shield wire. The height of the tower is around 50 m;
- **Conductors:** the conductor is the line used to transmit electrical energy from one tower to the next until its connection with the High Voltage National Grid. There will be three (3) conductors that will connect through the cross-arms. The conductor will be a 400 kV line;
- **Cross-Arms:** each tower will have three (3) steel beam cross arms which connect the conductors (discussed below) with the towers;
- **Optical Ground Wires (OPGW)** (or **Shield Wire):** positioned above the phase conductors, the shield wire is grounded at each tower to facilitate the safe and rapid dissipation of voltage surges caused by technical issues or external factors (e.g. lightning). There will be one per side of the double-circuit tower peak arrangement; and
- **Insulators:** provide electrical isolation and support for the conductors, which are typically made of aluminum or aluminum alloy. Insulators isolate the towers from the live wires that carry the electricity.

In addition, the following is noted:

- A temporary construction corridor of approximately 90 m will be utilized during construction activities, including tower foundation works, erection, and stringing operations.
- The permanent Right-of-Way (ROW) for the OHTL is approximately 30 m buffer corridor, to be maintained for the operational phase of the line.

Figure 6: Components of an OHTL

- Gas Pipeline Tie-in

Natural gas, which will serve as the primary fuel for the Project, will be supplied by NEPCO through a dedicated approximately 300 m pipeline connection to the existing natural gas pipeline to the west of the Project boundary as shown in Figure 8. NEPCO will provide a spur line from the main gas pipeline and install a gas metering station within a fenced area of around 40 m × 60 m located outside the CCGT power plant boundary.

The spur line connects to an existing gas compression station that has been in place since 2019. Such gas compression stations are located all throughout the gas pipeline route that runs throughout Jordan from south (starting in Aqaba) to north (in Irbid), and control the gas pressure throughout the main pipeline. The compression stations will be expanded to account for the metering station noted above.

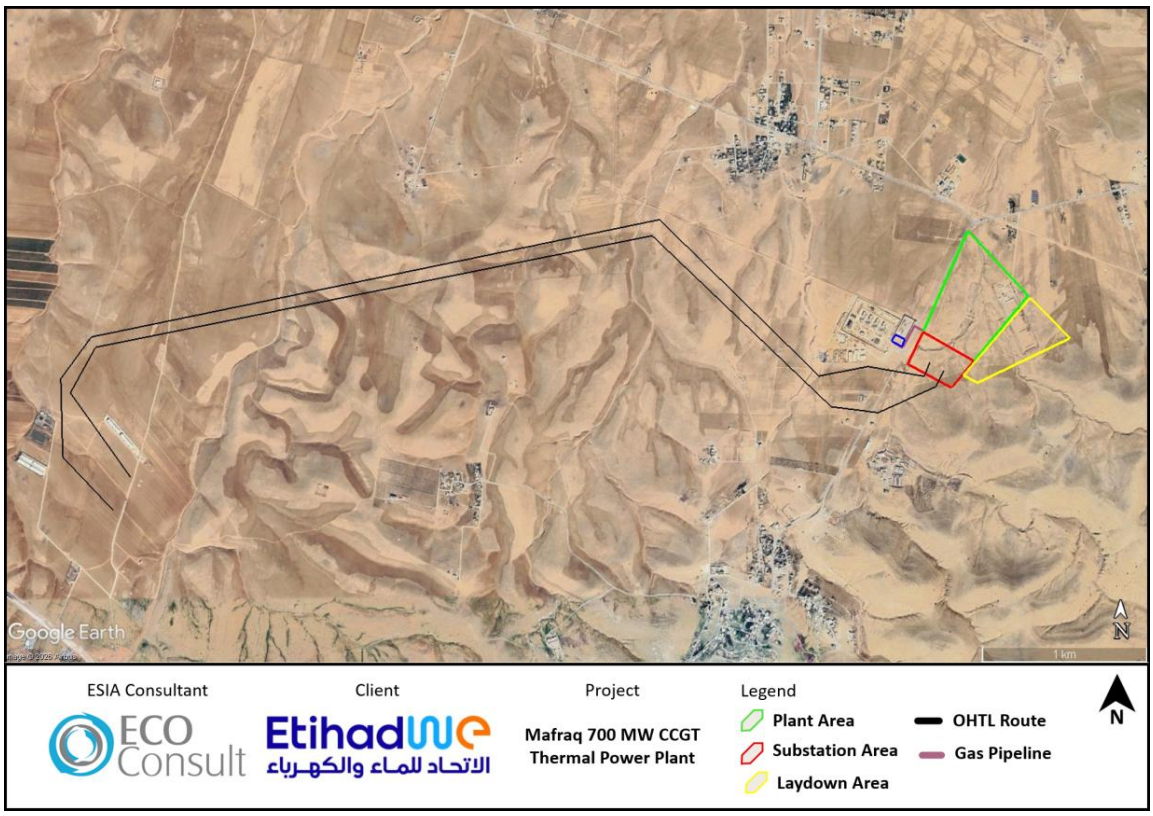

Figure 7: Project Site and Associated Facilities

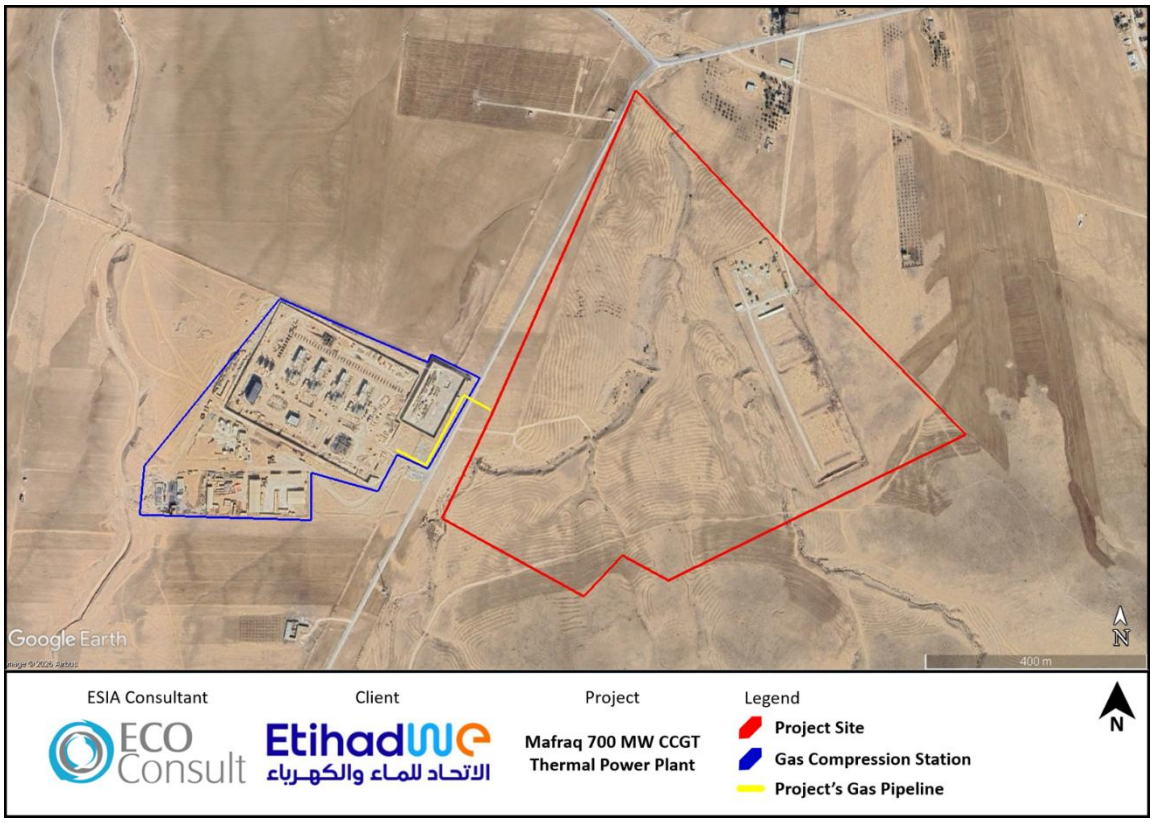

Figure 8: Gas Pipeline

- Water Supply Pipeline Tie-in

Raw water of drinking quality will be supplied by the Water Authority of Jordan (WAJ) and Yarmouk Water Company (YWC). The Project will include seven days of on-site raw water storage capacity. At the time of writing, the supply of water is expected to be via a local tie-in to the existing water supply network.

Recently (on 22 June 2026), the pipeline route was obtained unofficially as a map as presented in the figure below. The pipeline runs from an existing water pumping station in Umm Al Lulu village to the Project site, for a total distance of 4.5 km. It seems that the pipeline follows the existing RoW of an existing infrastructure element (another pipeline or dirt road).

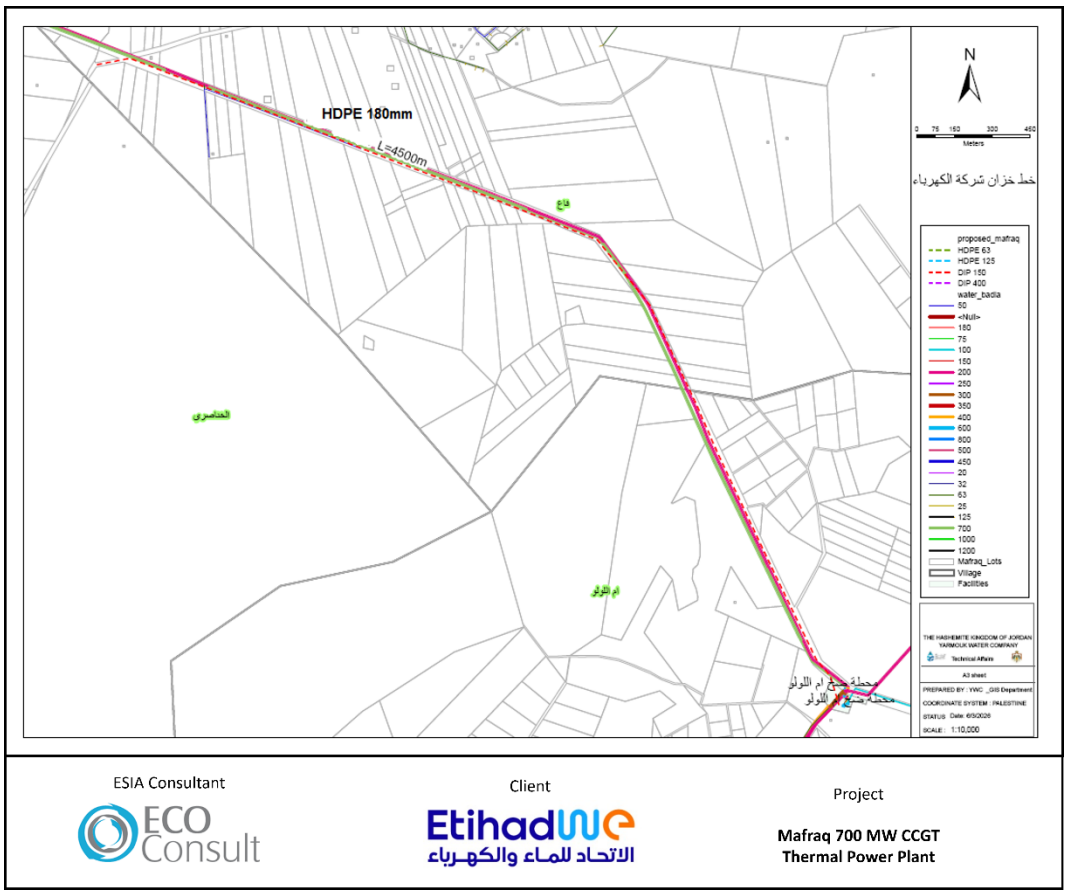

Figure 9: Water Pipeline

2.3 Workforce Requirements

The Project is expected to employ around 1,500 workers at the peak of construction for an approximately 20-month construction period. Around 60 workers are expected during operation over the 25-year Project term. The detailed breakdown between skilled, semi-skilled and unskilled positions remains to be confirmed. Recruitment is to be fair and transparent, compliant with Jordanian law, non-discriminatory and designed to maximize qualified local employment without creating unrealistic expectations.

2.4 Project Phases

The Project will be implemented through the following phases:

- Planning and design: completion of environmental and social studies, permits and financing; selection of the EPC Contractor and Operator; detailed engineering; finalization of connection arrangements; and preparation of management plans. This phase is expected to be completed in Q3 2026.
- Construction and commissioning: mobilization, site clearance and grading, drainage and foundations, installation of the gas turbines and auxiliary systems, construction of buildings, pipelines, substation and grid connections, testing and commissioning, and removal of temporary facilities. Construction is expected to begin at the end of Q3 2026.
- Phase 1 simple-cycle operation: the three gas turbines will initially operate independently. Commercial operation is planned for June 2028.
- Phase 2 combined-cycle operation: the heat recovery steam generators and steam turbine will be integrated and commissioned. Combined-cycle operation is planned for June 2029.
- Operation and maintenance: continuous generation of around 700 MW of dispatchable electricity, routine inspection and maintenance, fuel and water management, environmental monitoring, emergency preparedness and periodic overhaul throughout the 25-year term.
- Decommissioning or transfer: before the end of the Project term, the Developer and NEPCO will determine whether the term will be extended, NEPCO will purchase the facility, or the facility will be dismantled. If dismantling occurs, reusable equipment will be recovered where practicable, recyclable materials will be separated, wastes will be sent to licensed facilities, and the site will be restored in accordance with the requirements and agreements applicable at that time.

2.5 Need for the Project and Alternatives

The Project is intended to provide reliable and dispatchable generation that can respond to electricity demand and support the integration of renewable energy. In the absence of the Project, Jordan would lose approximately 700 MW of planned capacity, along with the associated contribution to grid stability, energy-security objectives, local employment and procurement. The no-project alternative would avoid the Project's site-specific impacts and greenhouse-gas emissions, but would not meet the identified system need that underpins IPP7.

Site selection considered land ownership, proximity to fuel, water and grid infrastructure, access, topography, community receptors, biodiversity and cultural-heritage constraints. The selected site is State-owned, relatively uniform and close to the existing gas network, a water-supply connection, a planned grid substation and existing roads. It does not overlap a protected area, Important Bird Area, Key Biodiversity Area or known archaeological site, and no residence is located within the plant footprint.

For the 400 kV overhead transmission line, a direct straight-line route would have been approximately 2 km shorter but would have crossed existing structures. The selected route is longer but avoids those structures, reducing physical-displacement and safety risks and limiting the compensation burden.

The technology assessment compared different gas-turbine classes and selected E-class Ansaldo AE94.2 units as the preferred balance between output, efficiency, proven performance and grid requirements. Based on the selected configuration, combined-cycle efficiency is expected to be approximately 52–53%,

while simple-cycle efficiency is approximately 35–40%. Final performance will depend on detailed design and operating conditions.

Air cooling was selected instead of wet cooling. A wet-cooling system could require approximately 1,000 m^3/hour, which would be incompatible with the need to conserve scarce water resources. The air-cooled condenser substantially reduces water demand, although it entails an estimated efficiency penalty of approximately 1–1.5%. Natural gas was selected as the routine fuel because it has lower particulate, sulfur dioxide and carbon emissions than distillate oil; higher-emission distillate fuel will be reserved for limited backup use.

3. SUMMARY OF ENVIRONMENTAL AND SOCIAL BASELINE CONDITIONS AND IMPACTS

3.1 Introduction

The ESIA established baseline conditions through desk studies, field surveys, monitoring, modeling and stakeholder consultation. The study area varied by topic. Localized construction effects were considered around the plant and connection corridors, while wider study areas were used for landscape, biodiversity, traffic, socioeconomic, climate and cumulative-impact assessment.

Potential impacts were assessed by combining the sensitivity of the affected environmental or social receptor with the expected magnitude, duration, extent, reversibility and likelihood of the effect. Ratings range from negligible to minor, moderate and major, and beneficial effects are identified separately. The ESIA then applied the mitigation hierarchy: avoid impacts through design where possible; minimize and manage impacts that cannot be avoided; restore or reinstate affected conditions; and use compensation or offsetting only as a last resort.

The residual impact is the effect expected to remain after the proposed measures are implemented. Many construction effects are temporary and can be reduced to minor levels through established controls. Some impacts require continuing attention: operational greenhouse-gas emissions remain moderate; the permanent plant and transmission infrastructure create a minor-to-moderate landscape effect; and construction labor, occupational health and safety, and gender-based violence risks remain moderate even after mitigation because of their potential severity.

3.2 Environmental and Social Baseline Conditions and Impacts

3.2.1 Landscape and Visual

The Project site and its surroundings are characterized by a predominantly flat, open and arid landscape at an elevation of approximately 650–680 m above mean sea level. The area contains limited and scattered vegetation and largely barren ground, with some evidence of previous ploughing. Although the landscape is not subject to any formal landscape or visual designation and is considered to have relatively low intrinsic landscape value, its open character provides limited natural screening. The surrounding landscape is already influenced by existing infrastructure, including the road immediately west of the site, the gas compression facility under construction, and existing 132 kV and 400 kV electricity transmission infrastructure.

The main visual receptors comprise residents of the surrounding communities, nomadic and semi-nomadic grazers, users of the limited residential structures located north of the Project site, recreational users of the wider area and road users. The closest communities include Faa', approximately 0.76 km northeast of the site; Al-Harsh, approximately 1 km northwest; and Al-Khanasri, approximately 1.2 km southwest. Other communities within approximately 4 km include Umm Al Lulu, Deir Al Waraq, Manshyet Bani Hassan, Buraiqa and Hosha. Recreational users of the wider area, particularly Tell Al-Khanasri, may also be sensitive to changes in the surrounding views. Taking into account the open and unobstructed views available to these receptors, together with the currently dark night-time setting, their overall sensitivity to landscape and visual change is assessed as Medium.

During construction, vegetation and topsoil clearance, grading, earthworks, excavation, wadi re-routing and the establishment of temporary working areas will alter the existing landform and landscape character. Construction plant, cranes, stockpiles, spoil, temporary facilities, dust and night-time lighting will also temporarily reduce visual amenity. The construction of the plant structures, stacks, substation

and OHTL towers will progressively introduce large-scale industrial and vertical elements into the open landscape. Trenching and working areas associated with the water and gas pipeline connections will create additional temporary linear disturbance, although these pipelines are generally located within existing infrastructure corridors. Before mitigation, construction-phase landscape and visual impacts are assessed as Moderate Negative.

During operation, the power plant buildings, stacks, evaporation pond, substation, OHTL towers and above-ground gas infrastructure will remain visible as permanent industrial features. The Project will therefore result in a long-term change from an open, arid landscape to an industrial power-generation setting. Operational and security lighting may also introduce light spill and sky glow into the currently dark surroundings. These effects will be most noticeable from nearby communities and other receptors with open views toward the site. Nevertheless, the landscape is undesignated, has relatively low intrinsic value and is already influenced by roads, power lines and industrial infrastructure, which increases its capacity to accommodate further development. Before mitigation, operational landscape and visual impacts are assessed as Moderate Negative.

Mitigation measures will include optimizing the layout, height and massing of Project structures to reduce their visibility from nearby communities; using recessive and non-reflective colors and finishes; designing directional and shielded lighting to minimize light spill and sky glow; locating temporary facilities and stockpiles away from prominent viewpoints; controlling stockpile heights; implementing dust-suppression measures; and using temporary screening where practicable. Temporary working areas, pipeline corridors and other disturbed areas will be progressively reinstated to their pre-construction condition or better, including the reinstatement of landform, drainage and vegetation. The Project will also maintain any screening or landscape planting established around the facility, monitor the effectiveness of landscape and lighting controls and address complaints through the Project grievance mechanism.

Following implementation of these measures, the residual landscape and visual impact is assessed as Minor Negative during construction, as most construction effects will be temporary and reversible following reinstatement, and Minor to Moderate Negative during operation, as the permanent presence of the power plant, substation and OHTL cannot be fully screened or removed from surrounding views.

3.2.2 Land Use

The main power plant is on State-owned land and no residence, business or permanent livelihood activity was identified within the plant footprint. Physical displacement is therefore not expected. The grazing-reserve status, former shooting-range use and planned railway corridor require institutional agreements and safe handover, but consultations indicate that no individual grazing user will be displaced from the plant site.

The associated facilities have wider land requirements. The ESIA identifies approximately 99 private parcels intersected by the overhead transmission corridor and three (3) private plots intersected by the short gas Pipeline tie-in. The indicative water pipeline is expected mainly to follow existing road or infrastructure rights-of-way. Rain-fed barley cultivation occurs along parts of the transmission route, and a nomadic Bedouin camp, wells, telecommunication infrastructure and other land uses occur in the wider corridor.

Potential impacts include temporary loss of access or crops during construction, permanent tower-footing areas and easements, restrictions within safety corridors, damage to drainage or field access, and livelihood effects on people whose use is customary or informal and may not be recorded in title

documents. Before mitigation, the impact is Moderate Negative during construction and Minor Negative during operation.

The ESIA includes the development and implementation of a Land Acquisition Framework before construction, in accordance with Jordanian law, Good International Industry Practice, IFC Performance Standard 5 and applicable lender requirements. The framework is intended to ensure that affected people, including those with legal, customary or informal land rights, are treated fairly and left no worse off. Project commitments include continued refinement of the associated-facility routes to avoid and minimize impacts on private land and reinstatement of temporarily disturbed areas to their pre-construction condition or better, including restoration of drainage, access, affected networks and vegetation. The ESIA also identifies the potential for damage to crops, fences, irrigation infrastructure and other land-based assets and refers to the need for fair and timely compensation and livelihood restoration. The detailed survey, valuation, compensation and grievance procedures will need to be defined through the land-acquisition planning process. Following mitigation, the residual impact is assessed as Minor Negative during construction and Negligible to Minor Negative during operation. The main Plant Area is unoccupied; however, potential displacement impacts along the associated-facility corridors will need to be confirmed once the routes and affected land interests have been finalized.

3.2.3 Stakeholder Engagement

Stakeholder engagement began in April 2026 and included targeted meetings with national and local authorities, service providers and specialist organizations; a formal public scoping session; household-level identification within the local area; and focus-group discussions. Focus-group discussions were held in Manshyet Bani Hassan on 20 May 2026 and in Al-Harsh on 21 May 2026, with participation from communities including Faa', Buraiqa, Al-Khanasri and Hosha.

The principal issues raised by stakeholders included:

- Potential air emissions, dust, odor, noise, health effects and greenhouse-gas emissions from a gas-fired power plant.
- Flash-flood and wadi risks, groundwater protection, the availability of water in a water-stressed region, and assurance that untreated wastewater will not be discharged.
- Why a gas-fired project was selected rather than a renewable project, and how the site and transmission route were chosen.
- Biodiversity, visual change, access to open land, hunting or recreation, and interactions with the nearby agricultural research setting.
- Traffic, road safety, emergency planning, gas or fuel leaks, fires, explosions, transmission safety and cumulative effects with existing and planned developments.
- Private-land effects from the transmission line and pipelines, possible effects on land value, and the treatment of customary or informal land users.
- Meaningful local employment, transparent recruitment, training, procurement from local businesses and cooperatives, opportunities for women and young people, and community-development support.

The Stakeholder Engagement Plan requires continuing engagement before construction and throughout the Project, timely disclosure of design and schedule updates, clear communication of job numbers and

eligibility, and accessible grievance channels. Grievances must be logged, acknowledged, investigated and closed without retaliation. Separate confidential channels will be available for workers and for sensitive complaints such as sexual exploitation, abuse and harassment.

3.2.4 Air Quality and Dust

Ambient air-quality monitoring was undertaken at two locations during May and June 2026. Sulfur dioxide, nitrogen dioxide and carbon monoxide were within applicable limits. Average PM10 concentrations were approximately 49.1 and 43.1 µg/m³, and average PM2.5 concentrations were approximately 12.4 and 13.6 µg/m³ at the two monitoring locations. Longer-term Ministry of Environment data for Mafraq show elevated annual PM10 and recurring daily exceedances, which are considered strongly influenced by the naturally dusty environment and regional sandstorms. The receiving airshed is therefore already sensitive to additional dust.

During construction, diesel-powered plant and vehicles will emit combustion pollutants, but these effects are expected to be localized and very small at the nearest residences. Earthworks, grading, excavation, stockpiles, unpaved roads and vehicle movements could generate more noticeable dust. Before mitigation, construction dust is rated Moderate Negative, while other construction air emissions are Minor Negative.

During operation, the principal sources will be the main gas-turbine stacks and, when required, backup distillate fuel and emergency generators. Dispersion modeling assessed natural-gas and backup-fuel scenarios and predicted no exceedance of the assessed nitrogen dioxide, carbon monoxide, sulfur dioxide or particulate standards at selected receptors. Natural-gas contributions were less than one quarter of the relevant standards. The modeling assumes distillate fuel with sulfur content not exceeding 0.5%, main stacks approximately 60 m high, dry low-NOx combustion and continuous emissions monitoring.

Key controls include:

- A Construction Air Quality and Dust Management Plan covering watering, speed limits, covered loads, stockpile management, wheel and road cleaning, prompt reinstatement and suspension or modification of dusty work during severe winds.
- Well-maintained construction equipment, avoidance of unnecessary idling and prohibition of open burning.
- Final stack and emissions design meeting Jordanian and lender requirements, dry low-NOx burners, good combustion control and use of natural gas as the normal fuel.
- Continuous emissions monitoring for relevant pollutants, periodic stack testing, ambient monitoring where required, fuel-quality records and corrective action if performance approaches permit limits.

With these measures, the residual air-quality and construction-dust impact is expected to be Minor Negative.

3.2.5 Noise and Vibration

Baseline monitoring reflects an already windy and intermittently disturbed rural setting. Representative daytime noise levels were approximately 48.1 and 53.8 dB(A), while representative nighttime levels were approximately 49.7 and 53.1 dB(A). The measured nighttime levels exceeded the 45 dB(A) residential

guideline before the Project, so the assessment considered both absolute levels and the increase caused by the Project.

Construction noise will arise from earthmoving, piling or foundation work, vehicles, cranes, generators and installation activities. Effects will be temporary but could be noticeable at the closest residences or along the connection corridors. Operational sources include gas turbines, heat recovery steam generators, the steam turbine, air-cooled condenser fans, transformers, pumps, vents and occasional emergency equipment.

Preliminary modeling predicted boundary levels generally at or below 70 dB(A), with one location at approximately 71 dB(A). Predicted Project-only levels at representative residences were approximately 46–51 dB(A). Combined with the existing environment, daytime levels are expected to meet the applicable limits, while nighttime levels could remain above the guideline unless the final equipment and layout include adequate acoustic controls. Before mitigation, construction and operational noise are rated Moderate Negative.

The required measures include:

- Vendor-specific acoustic data and an updated detailed noise model before final design is approved.
- Low-noise equipment, acoustic enclosures, silencers, lagging, barriers and optimized equipment layout, with contractual noise-performance guarantees.
- Construction working-hour controls near communities, advance notification of unusually noisy work, equipment maintenance, avoidance of simultaneous high-noise activities and a complaint-response procedure.
- Baseline confirmation and routine boundary and receptor monitoring during commissioning and operation, followed by additional attenuation where required.

With detailed design controls, verification and monitoring, residual construction and operational noise is expected to be Minor Negative.

3.2.6 Climate Change Risk Assessment

The climate-risk assessment considered acute hazards, such as flash floods, extreme wind and dust storms, and chronic changes, such as increasing temperatures and water stress. Exposure is assessed as high for extreme heat, heatwaves, flash floods and increasing mean temperature; moderate for extreme winds, dust storms and erosion-related hazards; and lower for several other hazards. Because detailed engineering safeguards are not yet final, the climate assessment must be revisited after the EPC design is available.

Climate-resilience requirements include design for a 1-in-100-year flood with a 20% climate-change allowance; high-resolution topographic survey and refined hydrological and hydraulic modeling; engineered diversion channels, embankments, swales and protected outfalls; scour and erosion protection; equipment and materials suitable for higher temperatures and dust; wind-resistant structures; heat-stress controls for workers; resilient water storage and leak management; and periodic review of climate data throughout operation.

Estimated construction emissions are approximately 46.4 thousand tonnes of carbon-dioxide equivalent. Over the assessed 27-year construction and operating period, total emissions are estimated at

approximately 65.6 million tonnes of carbon-dioxide equivalent. This comprises approximately 2.68 million tonnes during the simple-cycle period and 62.90 million tonnes during combined-cycle operation. Routine annual emissions are estimated at approximately 0.26 million tonnes during simple-cycle operation and approximately 2.44 million tonnes during combined-cycle operation. More than 99% of emissions are carbon dioxide from fuel combustion.

Embedded reduction measures include efficient combined-cycle operation, natural gas as the routine fuel, recovery of exhaust heat through the steam cycle, restricted use of higher-carbon distillate fuel, performance monitoring and maintenance to prevent efficiency deterioration. The Developer will quantify, verify and report operational emissions through its Environmental and Social Management System and monitor regulatory and market transition risks, including future carbon-policy, efficiency and decarbonization requirements.

Even after these measures, operational greenhouse-gas emissions are material and cannot be eliminated by normal operational controls. The residual climate-change impact therefore remains Moderate Negative. Transition risk is expected to be low in the short term but could rise to Moderate in the medium and long term as policy, technology and market conditions evolve.

3.2.7 Biodiversity

The Project does not overlap a protected area, Important Bird Area or Key Biodiversity Area. The nearest identified Irbid–Mafraq Plains Key Biodiversity Area is approximately 10 km northwest. The Project landscape is substantially modified: approximately 90% is modified agricultural land and around 10% is modified urban or infrastructure-related land. Much of the site is degraded or barren, although the wadi and drainage features support relatively greater shrub cover and habitat value.

Field surveys recorded nine plant species at the plant site and seven along the transmission route. No Iris bostrensis was observed. Mammal evidence was limited mainly to red fox; no bats or small mammals were recorded during the survey effort. Five reptile species were observed. Of particular importance, the spur-thighed or Greek tortoise (Testudo graeca), which is listed as Vulnerable, was recorded at three locations within the Project area.

Bird surveys recorded seven species and 31 detections during 12 sessions between March and June 2026. The results did not indicate a high-density migration bottleneck, but the 400 kV overhead transmission line could create collision or electrocution risk, particularly for raptors and harriers. The power-plant footprint will create a permanent habitat change of approximately 35 ha, excluding small transmission-tower footprints. Before mitigation, biodiversity impacts are rated Moderate Negative.

The Biodiversity Management Plan will include:

- Pre-construction walkover surveys and an active-season tortoise survey immediately before clearance, with no-go areas clearly marked.
- Capture and translocation of tortoises by qualified specialists in coordination with the Royal Society for the Conservation of Nature and the Ministry of Agriculture, together with records and post-release follow-up where required.
- Minimization of the clearance footprint, protection of wadis and retained vegetation, controlled access, prohibition of hunting and collection, worker awareness and rapid reinstatement of temporary disturbance.

- Landscaping with appropriate native species, consistent with the 25% landscaping requirement identified in the applicable 2026 land-use regulation and with biodiversity-management objectives.
- Wildlife-sensitive transmission design, including safe conductor arrangements and post-construction bird-fatality monitoring during spring and autumn. Bird-flight diverters or other adaptive measures will be installed where monitoring identifies a material risk.
- Management of the evaporation pond to avoid attracting or harming birds, including deterrents and operational controls where necessary.

With these measures, residual construction and operational biodiversity impacts are expected to be Minor Negative.

3.2.8 Geology, Hydrology, and Hydrogeology

The site is an arid to semi-arid terrestrial environment with shallow drainage features and seasonal wadis rather than permanent surface watercourses. Groundwater is an important and already stressed regional resource. The groundwater-sensitivity assessment indicates predominantly low sensitivity across the Project area, but a well immediately adjacent to the site lies in a zone where groundwater depth is estimated at approximately 142–194 m. Protection from spills and long-term leakage is therefore important even though groundwater is relatively deep.

Flood modeling considered a 1-in-100-year event with a 20% climate-change allowance. Before mitigation, parts of the Project area could experience moderate or significant flood hazard, with extreme hazard close to one drainage channel. The preliminary modeling demonstrates that diversion and drainage measures can substantially reduce the risk, but the final design requires more detailed topographic data, updated grading information and rebuilt hydraulic models.

Other potential effects include soil compaction and erosion, disturbance of natural drainage, uncontrolled excavation or topsoil mixing, contamination from fuels, oils, chemicals and waste, leakage from tanks or pipelines, and failure of the lined evaporation pond. Before mitigation, physical-terrestrial impacts are rated Moderate Negative.

Key measures are:

- Detailed geotechnical, topographic, hydrological and hydraulic design; diversion channels, embankments, erosion protection, internal drainage and controlled discharge or infiltration arrangements; and maintenance of drainage throughout construction.
- A Pollution Prevention and Control Plan, spill-prevention and response procedures, secondary containment, compatible chemical storage, controlled refueling and immediate investigation and remediation of spills.
- Bunded diesel tanks, leak detection, integrity testing, hazardous-area design and HAZOP/HAZID review of fuel, gas, chemical and wastewater systems.
- A fully lined and monitored evaporation pond designed for the relevant loads, with freeboard, inspection, groundwater-protection and emergency arrangements.
- An excavation-permit system, segregation and reuse of suitable topsoil, erosion and sediment controls, and a Reinstatement Plan for temporary work areas.

- Formal unexploded-ordnance and contamination clearance associated with the former shooting range before intrusive work begins.

With these requirements incorporated into design and construction, residual effects on soils, drainage, flood risk and groundwater are expected to be Minor Negative.

3.2.9 Archaeology and Cultural Heritage

The archaeological assessment and Department of Antiquities review did not identify a known archaeological site within the Project footprint or associated corridors that would prevent development. The Project is not within a UNESCO World Heritage Site, and the nearby Al-Khanasri Hill is outside the development area. The principal risk is the accidental discovery of buried remains during excavation.

A Chance Find Procedure will apply to all earthworks. If a possible archaeological object or feature is encountered, work will stop, an exclusion area of at least 25 m will be established, the Department of Antiquities will be notified, and work will not resume until the competent authority provides direction. Workers will receive awareness training, and a qualified archaeologist will provide a watching brief for ground-disturbing activities where required. The pre-mitigation impact is Minor Negative and the residual impact is expected to be Negligible.

3.2.10 Socio-economic Conditions, Local Employment and Local Content

Mafraq Governorate and the nearby communities experience unemployment, limited formal employment opportunities and pressure on public services. Local consultation also identified a strong perception that previous industrial developments have not consistently provided transparent or meaningful local opportunities. Women's economic participation is low despite education levels and expressed interest in suitable employment and business opportunities.

The Project can provide positive employment, training and procurement benefits. Around 1,500 positions are expected at peak construction and around 60 during operation. Local demand may also benefit transport, accommodation, food, maintenance and other suppliers. However, unrealistic expectations, opaque recruitment, outside hiring where local skills exist, informal payments, unequal access or inadequate communication could create distrust, protest or community tension. The ESIA therefore adopts a precautionary pre-mitigation rating of Major Negative for potential construction-stage employment and procurement conflict, alongside the potential for a Major Positive benefit if opportunities are delivered fairly.

Measures to realize the benefit and control the risk include:

- A Local Employment and Procurement Plan with realistic targets, clear eligibility criteria, public advertising and documented selection procedures.
- A transparent order of priority, subject to qualifications and legal requirements, beginning with affected and nearby communities, then the Northwestern Badia and wider Mafraq Governorate.
- Use of the National Employment Program and coordination with municipalities, employment offices, vocational institutions, women's organizations, cooperatives and youth groups.

- No recruitment fees, brokers or preferential treatment based on tribal, family, gender or other prohibited grounds; equal pay for work of equal value; and accessible grievance channels.
- Advance disclosure of the actual number, duration and skill requirements of jobs, together with training or apprenticeship opportunities where feasible.
- Local supplier registration, fair tendering, reasonable packaging of contracts for small and medium enterprises, and monitoring of local-content outcomes.
- A structured Community Development Plan informed by community priorities, available budget, implementation schedule and avoidance of duplication with public services.

After these measures, the expected employment and local-content benefit is Moderate Positive during construction and Minor Positive during operation. Residual adverse risk is expected to be Minor Negative during construction and Negligible to Minor Negative during operation.

3.2.11 Infrastructure and Utilities

The Project will interact with the regional water system, roads, waste facilities, wastewater services, electricity and telecommunications. Water demand is approximately 600 m^3/day. Consultations indicate that the wider Mafraq water system has seasonal surplus and deficit conditions and may require additional wells or system reinforcement before the Aqaba–Amman Water Desalination and Conveyance Project is expected to augment supply around 2030. The Water Management Plan will therefore establish demand budgets, metering, leakage controls, reuse targets, supply monitoring and coordination with Yarmouk Water Company so that Project supply does not unreasonably affect other users.

Process wastewater will be managed under the zero-liquid-discharge concept. Domestic wastewater and other streams that cannot be reused will be handled by approved systems and licensed facilities. Municipal, construction and hazardous waste will be separated, stored securely, documented and transported only by authorized contractors to approved recycling, treatment or disposal facilities. Waste minimization and recovery will be applied before disposal.

Construction will generate heavy and light vehicle movements on Highway 35, Highway 25, Buraiqa local road and access intersections. Risks include congestion, road-surface damage, abnormal-load movements, pedestrian and livestock conflict, driver fatigue, dust and collision. A Traffic and Transport Management Plan will identify approved routes, vehicle schedules, abnormal-load permits, traffic-control points, speed limits, driver training, road-condition surveys, community notification and emergency arrangements. Temporary utility interruptions will be avoided through service surveys and coordination with service providers.

With these controls, infrastructure, utility, traffic and waste effects are expected to be generally Minor Negative. Water availability remains a key management issue requiring continued confirmation and monitoring throughout the Project term.

3.2.12 Community Health, Safety and Security

Potential construction risks include road traffic, open excavations, unauthorized access, dust and noise, worker influx, communicable disease, pressure on services, damage to third-party infrastructure and inappropriate worker or security conduct. Operational hazards include high-pressure gas, distillate fuel,

fire and explosion, steam and hot surfaces, electricity, chemicals, large transformers, overhead lines and emergency releases. Structures taller than 40 m and the overhead line also require aviation-safety coordination.

The principal controls include:

- A Community Health, Safety and Security Plan and a site-specific Emergency Preparedness and Response Plan developed with Civil Defence, health facilities, police, municipalities, NEPCO, gas and water operators and other relevant authorities.
- Quantitative risk assessment, HAZID and HAZOP studies, hazardous-area classification, fire detection and suppression, gas detection, emergency shutdown, secondary containment, safe separation distances and regular drills.
- Secure fencing, controlled access, warning signs, safe trench management, lighting and public information, with rapid closure of temporary hazards.
- A Security Management Plan aligned with human-rights principles, including screening, training, proportionate use of force, incident reporting and a grievance mechanism for community concerns.
- Civil Aviation Regulatory Commission and Jordan Armed Forces approvals, obstacle markings and lights, and warning spheres or other markers on transmission conductors where required.
- A Worker Code of Conduct and accommodation, health and communicable-disease measures to reduce worker-influx impacts.

Before mitigation, community impacts are Moderate Negative during construction and Minor to Moderate Negative during operation. With the plans and engineering safeguards in place, residual impacts are expected to be Minor Negative during construction and Negligible to Minor Negative during operation.

3.2.13 Labor Management, Working Conditions and Occupational Health and Safety

Construction of a complex power plant by multiple contractors creates significant occupational health and safety and labor-management risks. These include heavy equipment, lifting, work at height, electrical work, confined spaces, excavations, hot work, pressure systems, traffic, dust, noise and heat stress. Migrant workers, refugees, women and workers hired through labor intermediaries may be particularly vulnerable to recruitment fees, unclear contracts, withheld documents, discrimination, excessive hours or inadequate grievance access.

The EPC Contractor and Operator must implement a Labor and Working Conditions Plan and an Occupational Health and Safety Plan consistent with Jordanian law and lender standards. These plans will require written terms of employment, lawful wages and benefits, timely payment, working-hour and overtime controls, social-security registration, no child or forced labor, no retention of identity documents, employer-paid recruitment, equal opportunity, suitable facilities for women and persons with disabilities, and a confidential worker grievance mechanism.

Occupational controls will include competency requirements, induction, toolbox talks, permit-to-work systems, lockout and tagout, lifting plans, confined-space control, fall protection, electrical isolation, personal protective equipment, heat-stress management, medical services, incident investigation, stop-work authority, contractor audits and emergency drills. Worker accommodation, if provided, will meet applicable IFC/EBRD guidance and be independently inspected.

The ESIA rates the pre-mitigation labor and occupational impact as Moderate Negative during construction and Minor Negative during operation. Because construction hazards can have severe consequences even under a mature management system, the residual construction rating remains Moderate Negative; the operational residual rating is Minor Negative.

3.2.14 Gender-Based Violence, Sexual Exploitation, Abuse and Harassment

A predominantly male construction workforce, workforce influx, hierarchical labor relationships and unequal access to employment can increase the risk of gender-based violence and harassment, sexual exploitation, abuse and harassment, and retaliation against people who report concerns. Women workers, female job applicants, community members, migrant workers and young people may face different risks or barriers. Before mitigation, the risk is rated Major Negative during construction and Moderate Negative during operation.

The Project will apply a survivor-centered and confidential approach, including:

- Zero-tolerance policies, contractual clauses and enforceable worker and security codes of conduct.
- A Gender and Human Rights Action Plan and project-specific GBVH/SEAH procedure, with clear roles, sanctions and reporting requirements.
- Induction and repeated training for workers, supervisors, human-resources staff, recruiters, security personnel and community-liaison staff.
- Multiple confidential reporting routes, trained female focal points, anonymous options, protection against retaliation and referral pathways to qualified health, psychosocial, legal and protection services.
- Women-only consultations where appropriate, safe transport and accommodation, separate and secure sanitation and changing facilities, adequate lighting, and measures to prevent harassment in recruitment and the workplace.
- Careful data management and monitoring that protects identities and does not require survivors to repeatedly recount their experience.

After these measures, the residual risk is expected to be Moderate Negative during construction and Minor Negative during operation. The remaining construction rating reflects the seriousness of possible harm rather than an expectation that incidents will occur.

3.2.15 Cumulative and Transboundary Impacts

The cumulative assessment considered the existing Al-Khanasri gas compressor station approximately 100 m west of the site, the planned railway, NEPCO's new substation and transmission developments, other regional infrastructure and the Project's contribution to national and global greenhouse-gas emissions. The Project will coordinate schedules, traffic, drainage, reinstatement and monitoring with NEPCO and relevant authorities. If sufficient design and emissions data for the compressor station become available, a quantitative cumulative air-dispersion assessment will be completed to confirm the preliminary conclusion.

Project-level mitigation is expected to keep cumulative effects on air quality, noise, traffic, land, biodiversity and services below significant levels. The residual cumulative effect of adjacent electricity infrastructure is expected to be Minor Negative. The cumulative climate impact remains Moderate Negative because the Project will contribute material emissions from unabated gas-fired generation even when operated efficiently.

The Syrian border is approximately 15 km north of the Project. Construction dust, noise and operational air-quality effects are localized and are expected to reduce to negligible levels well before the border. No significant transboundary air-quality or noise effect is anticipated. Greenhouse-gas emissions have a global effect and are addressed separately through climate assessment.

3.2.16 Overall Residual Impact Summary

After implementation of the ESIA commitments, the principal residual outcomes are:

- Minor Negative: air quality and dust; noise; biodiversity; soils, groundwater and flood-related effects; cultural-heritage chance-find risk; most traffic, utilities, waste and community-health effects; and construction-stage land and livelihood effects.
- Negligible to Minor Negative: operational land and livelihood effects, many routine community-health and infrastructure effects, and archaeological effects after the Chance Find Procedure is applied.
- Minor to Moderate Negative: permanent operational landscape and visual change from the plant, substation and overhead transmission line.
- Moderate Negative: operational greenhouse-gas emissions; construction labor and occupational health and safety risk; construction GBVH/SEAH risk; and cumulative greenhouse-gas contribution.
- Moderate Positive during construction and Minor Positive during operation: local employment, procurement, skills and community-development benefits, provided that opportunities are transparent, realistic and accessible.

The ESIA concludes that the Project can be developed and operated in accordance with the identified national and lender requirements provided that the design commitments, management plans, land-acquisition measures, monitoring and continuing stakeholder engagement are fully implemented and verified. The remaining moderate impacts require active management, lender and regulator oversight and adaptive action throughout the Project life.

4. ENVIRONMENTAL AND SOCIAL MANAGEMENT AND MONITORING

The ESIA includes and Environmental and Social Management Plan (ESMP) which provides an outline plan for managing and monitoring the environmental and social impacts during construction, operation and decommissioning of the Project. The ESMP identifies the mitigation measures which aim to eliminate and/or reduce the potential impact to acceptable levels and monitoring actions to ensure that the identified mitigation measures are implemented.

During both construction and operation, certain activities, indicators and environmental and social receptors will be monitored. Monitoring may include observation and recording, or may include data gathering and sampling. Monitoring reports will be required from the Contractor and Operator during the construction and operational phases. The monitoring results will be useful for assessing the long-term cumulative effects, if any. If on-going problems occur, adaptive mitigation measures can be developed and implemented.

The Ministry of Environment will undertake regulatory compliance oversight, while the IFC, AIIB and their Lender Environmental and Social Advisor may review documents, inspect the site and monitor compliance with financing requirements. Relevant authorities will retain their statutory inspection and enforcement roles.

5. ASSOCIATED FACILITIES

The Project depends on infrastructure that is not limited to the fenced power-plant site. The ESIA treats the substation, OHTL, gas and water supply pipeline tie-ins as associated facilities because they are necessary for the Project to operate and can create environmental and social impacts of their own.

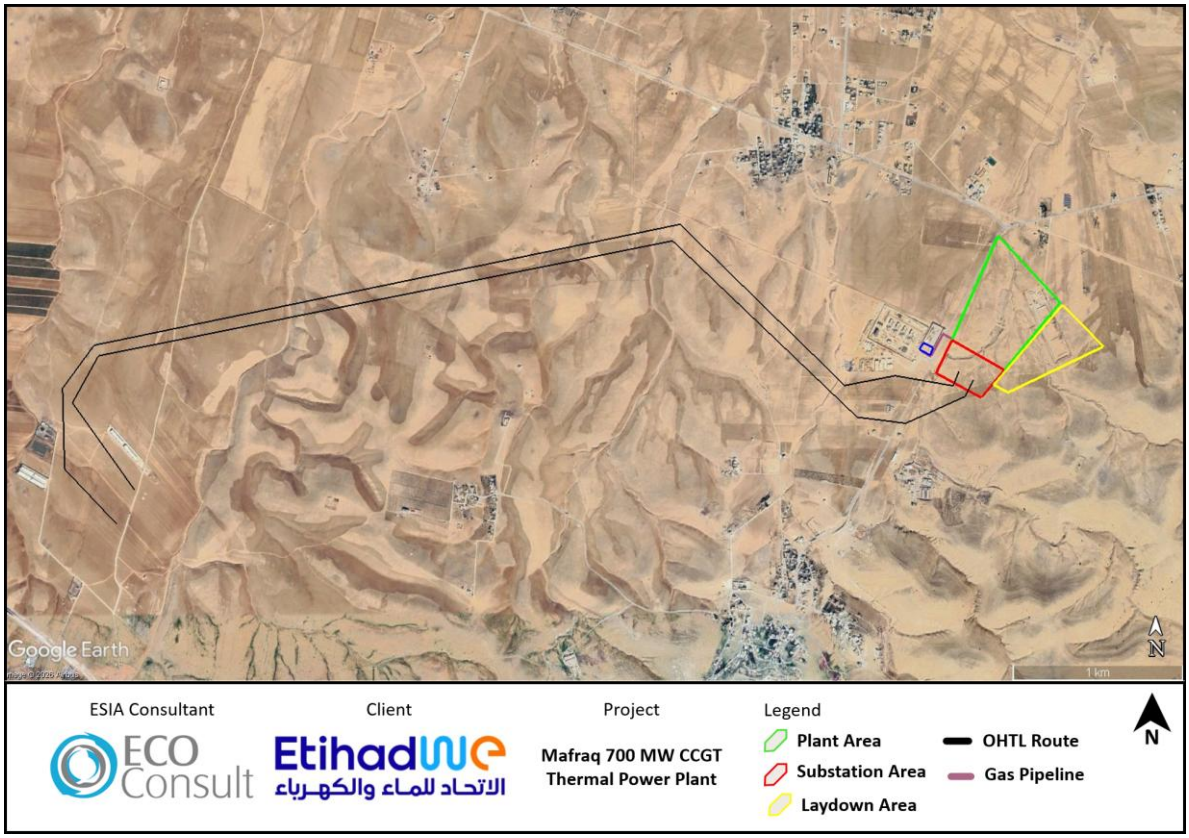

Figure 10: Project Site and Associated Facilities

The associated facilities comprise:

- Overhead Transmission Line (OHTL) and Substation: NEPCO will be responsible for the off-site electrical interconnection required to connect the Project to the national grid. The Project will be connected directly to the internal substation that will be constructed and operated by NEPCO, which will serve as the power evacuation point. NEPCO will be responsible for the design, construction, operation, and maintenance of the substation and associated interconnection facilities. The location of the substation and current indicative OHTL route is shown in the figure above.

  Total length of the OHTL is 6.8 km. The main component of the OHTL is the transmission tower. There will be a total of 208 towers, each will be a three (3) phase steel beam tower, which will transport electricity to the High Voltage National Grid.

- Gas Pipeline tie-in: Natural gas, which will serve as the primary fuel for the Project, will be supplied by NEPCO through a dedicated approximately 300 m pipeline connection to the existing natural gas pipeline to the west of the Project boundary as shown in Figure 15. NEPCO will provide a spur line from the main gas pipeline and install a gas metering station within a fenced area of around 40 m × 60 m located outside the CCGT power plant boundary.

- Water Supply Pipeline tie-in: an approximately 4.5 km pipeline from the Umm Al Lulu pumping-station area or the confirmed Yarmouk Water Company supply point. The alignment runs within the existing RoW of a formal road within which an existing water pipeline runs.

6. FURTHER INFORMATION AND CONTACT DETAILS

The full Project disclosure package is expected to include the ESIA, this Non-Technical Summary, the Stakeholder Engagement Plan and grievance mechanism, and the Land Acquisition Framework. The documents will be made available electronically and at accessible local disclosure locations before the applicable consultation and lender-disclosure periods. Final website links, hard-copy locations and contact numbers must be confirmed by the Developer before public disclosure.

Indicative hard-copy disclosure locations are:

- Mafraq Governorate Office – location, telephone and opening hours to be confirmed.
- Northwestern Badia / Hosha Sub-District administration – location, telephone and opening hours to be confirmed.
- Relevant local municipal office serving the affected communities – final office and contact details to be confirmed.

Contact details for the public

Community Liaison Officer – the Developer

- **Company:** Etihad Development Company
- **Point of Contact:** Mohamed Elbanna
- **Telephone Number:** +971503471304
- **Email:** Mohamed.Elbanna@etihadwe.ae

Stakeholders may submit questions or grievances verbally, in writing, by telephone, by e-mail or through the designated local liaison arrangements. Anonymous submissions will be accepted. Complaints will be handled without cost or retaliation, and use of the Project grievance mechanism will not restrict access to judicial or administrative remedies.