REPORT

Mirny (Kazakhstan) 1GW Wind Farm Project

APPENDIX B - Project Land Needs and Potential Displacement Impacts

Submitted to:

Aktas Energy LLP

Submitted by:

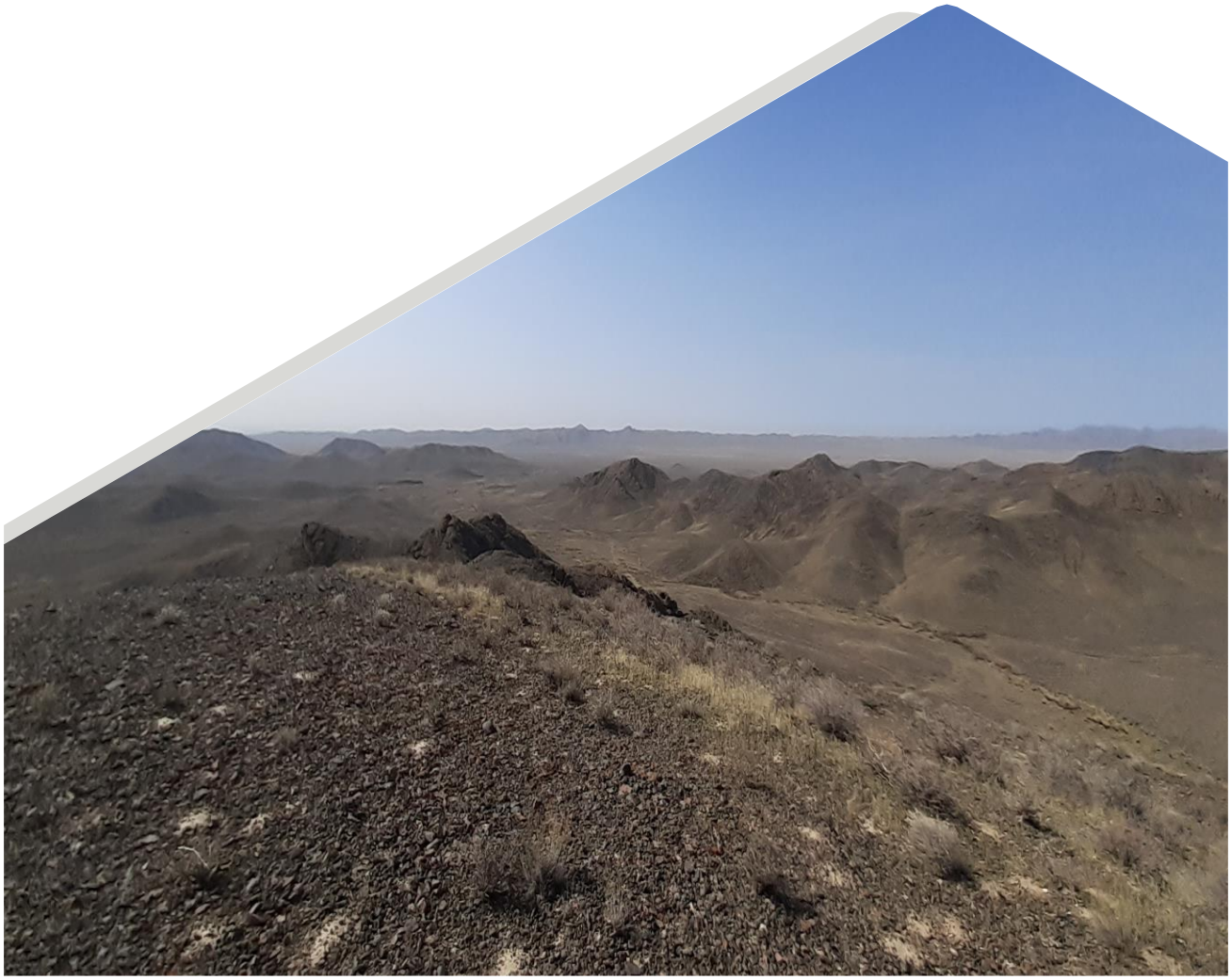
WSP ITALIA S.r.l.

Via Antonio Banfo 43, 10155, Torino Italia

+39 02 87 25 90 00

24685792-004-R-Rev 03

December 2025



Distribution List

Aktas Energy LLP

WSP Italia

Frequently used Abbreviations

Acronyms	Description
BESS	Battery Energy Storage System
EBRD	European Bank for Reconstruction and Development
ESIA	Environmental and Social Impact Assessment
IFC	International Finance Corporation
LRP	Livelihood Restoration Plan
O&M	Operation and Maintenance
PR	Performance Requirements
PS	Performance Standard
RAP	Resettlement Action Plan
RoW	Right of Way
SS	Substation
WPP	Wind Power Plant

Table of Contents

TABLES

1.0 PROJECT LAND NEEDS AND POTENTIAL DISPLACEMENT IMPACTS

1.1 Project Land Needs

As of 26 August 2025[1], the following categories of lands will be affected by the Project components within Moiynkum and Shu districts of Zhambyl region and Zhambyl district of Almaty region, through either acquisition or easement agreements (servitudes):

- **Agricultural Land**
  - Acquisition required: 21 plots, totaling 3,124.3 ha

    Easement agreements (servitudes) required: Applicable exclusively to the Overhead Transmission Line (OHTL) routes. These agreements grant usage rights for the transmission corridor without transferring ownership. Not available at the moment of writing, as the specific land plots affected by tower bases have not yet been defined.
- **Industrial Land**
  - Acquisition required: 1 plot, totaling 1.4 ha

    Easement agreements required: Applicable exclusively to the OHTL routes. These agreements grant usage rights for the transmission corridor without transferring ownership. Not available at the moment of writing, as the specific land plots affected by tower bases have not yet been defined.
- **Reserve Land**
  - Acquisition required: 2 plots, totaling 7,604 ha

    Easement agreements required: Applicable exclusively to the OHTL routes. These agreements grant usage rights for the transmission corridor without transferring ownership. Not available at the moment of writing, as the specific land plots affected by tower bases have not yet been defined.
- **Forest Fund Land**
  - Acquisition required: 8 plots, totaling 9,886 ha

    Easement agreements required: Applicable exclusively to the OHTL routes. These agreements grant usage rights for the transmission corridor without transferring ownership. Not available at the moment of writing, as the specific land plots affected by tower bases have not yet been defined.

The total number of land plots is around 105 and the total expected impacted area is **around** 20,000 hectares (tentative number at the time of writing).

Table *1* provides an overview of the Project components that require land acquisition and cause land acquisition impacts.

Please note:

- All figures presented in the text and tables reflect the status as of August 2025 and are tentative. Final data will be provided over the course of the land Acquisition Process and included in a Livelihood Restoration Plan (LRP).
- Easement rights: The figures provided below represent the general potential plots along the OHTL route that may be affected by land acquisition for the tower bases and easement agreements. At this stage, the exact locations of tower bases within the Right of Way (RoW) have not yet been determined. Therefore, the numbers are indicative only and subject to change following detailed design.

Table 1: Summary of Project Components and Associated Land Acquisition Impacts[2]

Project Component	Associated Land Acquisition Impacts
P1: WPP 250 MW + Access roads	■ Construction and maintenance of an access road with total area of 74,3517 hectareshectares require acquisition of: - 9 plots for agricultural activities with a total land of 62 ha ■ Construction and maintenance of turbines with on-site roads of 23 sections with 38 turbines require acquisition of: - 5 plots with the areas of populated settlements with the total area of 268,9 ha - partially affects reserve lands
P2: WPP 250 MW	Construction and maintenance of turbines with on-site roads in the amount of 30 sections with 40 turbines require acquisition of: - 5 plots for agricultural activities with a total land of 1825,9 ha and will partially affect: - reserve lands - 1 forest fund land plot
P3: WPP 300 MW	Construction and maintenance of turbines with on-site roads in the amount of 22 sections with 46 turbines require acquisition of: - 6 plots for agricultural activities with a total land of 1234 ha and will partially affect: - 1 forest fund land - reserve land
P4: WPP 200 MW	Construction and maintenance of turbines with on-site roads in the amount of 9 sections with 26 turbines will affect 1 forest fund land plot
S1, L1 Substation South + OHL 500 kV from SS Shu to SS South	Construction and maintenance of 500 kV power transmission line Substation South - Substation SHU with length of 143km do not require acquisition, but require easement agreements (servitudes) for: - 63 land plots for agricultural activities with a total land of 2409,28 ha - 2 land plots for industrial activities with a total land of 5,26 ha. The component activities partially affect forest fund lands: - Kokterek forest fund land plots in Moiyunkum district Koskuduk forest fund land plots in Shu district

[2] Disaggregated data for each project component concerning Reserve land is not fully available. Where data exists, it is reported; where it does not, this is because all components affect portions of the same two plots, which together total 7,604 hectares. The situation is similar for forest fund land: the total area is 9,886 hectares. Updated and definitive figures will be provided in the Livelihood Restoration Plan (LRP) as soon as they become available.

S2, L2, L3 SS North Mirny 500 kV. OHL 500 kV SS North Mirny - SS **Yukgres**. OHL 500 kV SS North Mirny - SS South Mirny	■ Construction of power transmission line 500 kV from Substation North Mirny to Substation Yukgres, 70.147 km long do not require acquisition, but require easement agreements (servitudes) for: - 5 land plots for agricultural activities with a total land of 379,7 ha and will partially affect for servitudes: - 1 reserve land plot with a total area of 8,8 ha - 3 forest fund land plots Development of land management project for the construction of power transmission line 500 kV from Substation North Mirny to Substation South Mirny, 18 km long do not require acquisition, but require easement agreements (servitudes) for: - 3 land plots for agricultural activities with a total land of 157,1 ha and will partially affect: - The same three forest fund land plots mentioned above, designated for the construction of the 500 kV power transmission line from Substation North Mirny to Substation Ulken.
U1 Upgrade SS Shu	Enhancement of Substation Shu require acquisition of 1 cadastral unit for agricultural activities with a total area of 2,4 ha
U2 Upgrade SS Yukgres	Enhancement of Substation Yukgres require acquisition of 1 cadastral unit for industrial activities with a total area of 1,4 ha
I1 Permanent Camp	Construction of permanent camp will require land acquisition and will partially affect 1 forest fund land plot
B1 - BESS Battery energy storage system 300 MW / 600 MW*h	Construction of BESS will require land acquisition and will partially affect 1 forest fund land plot

1.2 Land acquisition impacts

Methodology and limitations

The information presented in this Annex is based on data available at the time of the ESIA preparation. Additional data related to the land acquisition process, collected and analyzed in August 2025, has also been incorporated.

The cadastral data reviewed for this ESIA may contain information gaps. These will be verified as part of the LRP development through fieldwork, including the socio-economic survey, land and asset inventory, asset valuation, and consultations with affected landowners and users.

Potential gaps may include:

- Unregistered users of land and property;
- Deceased owners with legal heirs who are unregistered or have not completed inheritance procedures;
- Unregistered changes in property ownership;
- Unregistered rights of use (e.g., customary rental arrangements);
- Unregistered non-residential structures (e.g., auxiliary buildings);

- Unregistered building extensions exceeding the recorded property size;
- Unrecorded buildings (e.g., structures built without permits);

Another important limitation to consider in this study is that the ESIA baseline surveys do not cover the full routes of the three 500 kV OHTLs, the additional 35 kV OHTL, or the external access roads to the WPP site. Consequently, this impact assessment will need to be updated and refined using new data collected during the baseline data gathering for the LRP.

The Project is expected to result in economic displacement for formal leaseholders and informal land users due to the loss of assets or access to assets, which may affect income sources or livelihoods.

The occurrence of physical displacement is considered unlikely and will in any case need to be confirmed through forthcoming baseline studies (e.g., census and asset inventory).

1.2.1 Displacement impacts by Project Component

The Project footprint spans a range of land categories, including agricultural land, reserve land, Forest Fund land (forestry) and industrial land.

Each Project component has been assessed for its specific land requirements and associated impacts.

Construction Phase – Temporary land occupation (Temporary economic displacement)

During the 30–36 month construction phase, the Project will temporarily occupy land for various works. All displacement impacts in this phase are temporary and economic in nature – land use is temporarily discontinued and will be restored after construction.

Inside the WPP Site: Construction will require certain areas within the site to be cordoned off, disrupting existing land use (open grazing land) for the duration of works:

- Construction compound and workers' camp: 19.9 hectares will host the workers' camp, equipment yards, and site offices throughout construction. This area whether previously used for grazing routes or under lease, will be inaccessible to leaseholders or local users (e.g. herders) until it is dismantled and rehabilitated post-construction. Leaseholder(s) and local herders will experience a temporary loss of access to the grazing area and blocked access routes in that zone (a short-term economic impact). After construction, this area will be restored, and activities (e.g. crops, grazing) will be enabled to resume.
- Medium-voltage (MV) cable trenches: Approximately 180 km of trenches will be excavated on-site to bury 35 kV cables between the turbines. Each trench entails a narrow corridor of works moving across the site. As the trenching progresses, small strips of land will be temporarily taken out of use. Herders might be temporarily unable to graze animals, pass through or cross those active work corridors. These impacts are short-lived and rolling (as trenches are backfilled, the land is freed up again). They constitute temporary economic displacement – a short-term restriction on land use and livelihoods (grazing) with no lasting effect, since the land will be fully restored once cables are installed.
- 35kV Temporary OHTL: The temporary 35 kV OHTL will require a linear corridor for construction, including tower installation and conductor stringing. The RoW will be temporarily occupied during the construction phase, restricting access to the land for the duration of the works. If the alignment crosses areas currently leased or used for grazing purposes, leaseholders and informal users will experience a temporary loss of access to their leased land. This constitutes a short-term economic displacement, as leaseholders may be unable to carry out permitted activities within the affected corridor. Informal land users and herders may also face temporary disruption to grazing patterns or access routes. Upon completion of construction and dismantling of the temporary line, the land will be rehabilitated and returned to its prior condition, enabling leaseholders and informal users to resume their activities without long-term restrictions.

Outside the WPP site: Beyond the WPP Site, temporary land occupation will occur primarily along linear infrastructure corridors:

- Routes of the new three 500 kV OHTLs and 35kV OHTL used for construction. Construction of these components will require a temporary RoW where work will take place. Because the ESIA baseline did not cover the entire length of the OHTL routes, the exact locations and persons affected will be confirmed during the forthcoming census and asset inventory. However, the following temporary impacts are anticipated:
    - Temporary economic displacement due to restricted land access – Agriculture: In agricultural areas, if a transmission line RoW crosses cultivated fields, any standing crops may be damaged or destroyed by construction activities (e.g. by tower foundation excavation or movement of machinery) and farmers might be unable to plant or harvest on the affected strip of land for one growing season. This is considered temporary economic displacement, the land is not permanently taken, but crop income is lost for that period. Project-Affected Persons (PAPs) expected are farmers who own, lease, or informally cultivate land in the construction corridors. All such PAPs will be compensated for temporary loss of crops at full market value of the yield lost. After construction, they can resume cultivation in the RoW (since farming will be allowed under the lines during operation).
    - Temporary economic displacement due to restricted land access – Grazing: As the presence of herders cannot be excluded within the OHTLs RoW, if the transmission line routes traverse land used informally for grazing, informal livestock herders may temporarily lose access to some grazing areas during construction. For example, a herder may need to avoid a corridor where towers are being erected or may be unable to move livestock along their usual route if it is cut by an active work site. This results in temporary economic displacement for those herders – a short-term loss of grazing resources and potential inconvenience/cost (such as needing to graze elsewhere or feed hay). PAPs expected are informal herders using land along the OHTLs routes. The project will coordinate with herders to maintain access where possible (e.g. creating gaps or providing alternative driveways around work zones) and will compensate for any demonstrable losses, such as the cost of alternative fodder if grazing land is unusable. This impact is strictly temporary; once construction in a given segment is complete, herders can return to use the land as before.
    - Temporary economic displacement due to restricted land access - business disruption: the OHTL routes passes through agricultural, forest fund and reserve land in a rural area. In case any small informal business is found located along construction areas, it could experience temporary disruption. For instance, a farm-based workshop might see reduced customer access due to works or need to be moved to avoid construction dust. Affected informal businesses could suffer temporary loss of income (economic displacement) and, in some cases, might need to temporarily relocate equipment or operations. *PAPs expected are* owners of any such enterprises and their employees. If these types of businesses are found, Aktas will engage with any affected business owners in advance to plan measures – for example, providing signage or alternative access to keep a shop accessible, or assisting in the temporary relocation of movable assets. Any documented income loss during the construction period will be compensated. No physical demolition of business structures is expected purely for temporary access; if unexpected obstructions arise, the project will work to avoid or minimize dismantling.

All these construction-phase impacts outside the WPP Site will be confirmed and documented during the census and asset inventory. This survey will identify all land parcels and users affected by temporary occupation, including measuring crop areas and counting assets like trees or structures in work zones. The findings will feed into the LRP to ensure that each affected party receives prompt compensation and/or assistance. Since these

impacts are temporary, the emphasis is on timely, fair compensation and restoring land to its original condition or utility after works.

Construction Phase - Permanent land acquisition (Permanent economic and potential physical displacement)

Permanent land acquisition is required for the core Project infrastructure. These acquisitions result in permanent displacement impacts: affected persons will permanently lose land access or usage rights (economic displacement), and some may need to relocate structures or other assets (physical displacement). Below, we separate impacts inside the WPP site (the wind farm area) and outside the WPP site (transmission line routes and access roads), as the context and types of losses differ.

Inside the WPP Site

The following project components require permanent land take within this site:

- Installation of 150 Wind Turbine Generators (WTGs) across four phases for turbine foundations, crane pads, and associated infrastructure.
- Approximately 160 kilometres of internal roads.
- Battery Energy Storage System (BESS).
- Operations and maintenance (O&M) compound (offices, maintenance workshops, staff accommodation, etc.).
- Two new 500 kV substations: North Mirny and South Mirny.

The ESIA baseline confirms that this land, while officially classified as “agricultural” in the cadastre, was used only informally for livestock grazing - there were no cultivated crop fields, orchards, or permanent residences within the footprint. No commercial or industrial enterprises operated there either at the time of the surveys. Therefore we anticipate the following permanent displacement impacts inside the site:

- Permanent economic displacement due to permanent land loss – private land: Formal leaseholders (APs who held state leases for land) will lose the portions of their leased territories that fall within the project site. Since no formal crop farming was present, there is no loss of cultivated agricultural production. However, they will permanently lose the opportunity to use that land for income generation.
- Permanent economic displacement due to permanent lost access - Grazing: informal herders who traditionally accessed this area will lose access to that pasture. In practical terms, the stocking capacity of the surrounding community’s pastures is reduced – herders will have to graze their livestock on a smaller available area outside the permanent infrastructures and change their grazing routes. This is a permanent economic displacement impact: a loss of an income-generating resource (pasture) and a reduction in livelihood opportunity (livestock herding) for those users.
- Potential economic displacement of temporary shelters: While no permanent residential structures were identified within the WPP site during the ESIA phase, seasonal or temporary shelters (e.g., yurts) used by herders during spring and summer grazing periods have been observed. Their precise locations are not yet available and may change seasonally, making it unclear whether they fall within areas subject to permanent land acquisition or use restrictions. Further confirmation will be provided through additional baseline data collection activities (e.g., census and asset inventory) to populate the LRP.
- Potential physical displacement of community facility – Water wells**:** The social baseline noted the presence of water wells within the WPP site that local herders rely on for livestock water. Exact locations will be

confirmed during the LRP. If these wells are located within areas subject to acquisition or restrictions, they may also need to be relocated.

Outside the WPP Site

Outside the main site, permanent land acquisition is needed for linear components:

- Approximately 72 kilometres of off-site access roads. New access roads will permanently convert strips of land to public road use. This means some landowners will permanently lose those strips (which are typically alongside existing routes or across open land).
- The land beneath the tower bases for the three 500 kV OHTLs. Each transmission line tower requires a footing (e.g., a ~10 m × 10 m area) that will be permanently occupied by the pylon base. That specific land is effectively acquired out of private use (a small parcel at each tower location).

Since the ESIA baseline survey did not cover the full length of the line routes (which were finalized later), these impacts will be fully catalogued during the asset survey. We anticipate the following permanent displacement impacts outside the site:

- Permanent Economic Displacement due to permanent land loss – Agricultural whether applicable: The construction of the OHTLs will require the acquisition of the land beneath the tower bases for the three 500 kV OHTLs. The design of these tower bases has yet not been chosen and netiher the easement rights. Loss of perennial crops (e.g. trees) may happen if found present on the RoW.
- Permanent economic displacement of businesses (formal/informal) due to permanent land loss: In the unlikely event that a business (formal/ informal) lies directly in the path of an OHTL tower or access roads it may face permanent constraints or relocation. For example, if a small workshop is located where a tower needs to stand, that structure would need to be removed, potentially disrupting the business permanently or requiring it to move to a new site. PAPs: Owners of any affected business structures (and associated workers). Mitigation: If a business structure must be permanently removed or relocated, this is a case of both physical and economic displacement. If the business can remain in place but suffers a partial loss of land (say a storage yard shrinks due to the tower base or access roads, it will receive compensation for the reduced utility of its property and any resulting income loss. The aim is that no enterprise is worse off: it should be able to continue operating at a new location or in a modified configuration with no lasting loss of profitability.

Construction Phase - Permanent land use restrictions

Outside the WPP site, permanent land use restriction will apply for linear components:

- The ROW for the lines – roughly 60 m wide for the 500 kV lines. The land in the RoW remains under existing ownership but will be subject to permanent usage restrictions (through easements/servitudes) for safety clearance

Since the ESIA baseline survey did not cover the full length of the OHTL routes (which were finalized later), these impacts will be fully catalogued during the asset survey. The following permanent displacement impacts are anticipated outside the site:

- Permanent Economic Displacement – Agricultural land use restrictions: Where the transmission RoW crosses privately owned or leased agricultural land, the land will not be fully acquired from the owner, but it will be encumbered with a public servitude (easement) that imposes certain permanent restrictions on its use (see Operation Phase below for details of restrictions).The landowner/leaseholder will technically retain ownership and can continue to use the land within the RoW for acceptable activities (e.g. farming low-growing crops, grazing). However, they lose the freedom to use that land as before. In particular, they will

be prohibited from building any structures in the corridor and from planting trees or other tall vegetation. This significantly diminishes the land's utility and value for the owner: for instance, they cannot develop a house or a barn on it in the future, and some types of high-margin agriculture (e.g. orchards) are no longer possible. Effectively, the land's potential is reduced to open-field farming or grazing. This impact is a form of permanent economic displacement, as it reduces income opportunities and asset value, even though the land is not fully taken. PAPs: landowners (or long-term leaseholders) of affected plots; in some cases, non-titled land users if they were informally using a piece of state land in the RoW.

All the above permanent impacts outside the site will be verified during the census and asset inventory. This includes mapping each affected parcel along the line routes, identifying the owner and any non-owner users, recording assets like crops and trees, and noting any structures close to the alignment. The compensation agreements or awards will reflect not only the tangible assets (land, crops) but also the loss of any use rights (recorded as servitudes). The LRP will detail entitlements for these stakeholders, ensuring compliance with local law and lender standards. Importantly, no residences are expected to lie in the transmission corridors and access roads– the routing was chosen to avoid settlements – so we do not anticipate physical displacement of households along the OHTLs and access roads. If the additional studies to be carried out for the LRP reveal any dwelling within the corridor, the project will adjust the alignment or, if no alternative, acquire and relocate that dwelling with full compensation, in line with PS5 requirements. At this stage, however, permanent displacement outside the WPP site isseems to only to affect land and livelihood assets (economic displacement), not homes.

Operation Phase

During the operation phase, statutory safety zones come into effect around project infrastructure. These do not involve new land take but impose long-term land-use restrictions for safety. In essence, the operational phase impacts are a continuation of the permanent economic displacement already described, enforced through legal restrictions (easements/servitudes). No additional physical displacement occurs during operation, since all relocations, if confirmed, would have been completed prior to commissioning. Key operation-phase considerations:

Within the WPP Site

Permanent Protected zone (MV Cable Trench)

The following Project components require permanent protected zones:

- The medium-voltage (MV) cable trenches within the WPP site extend for approximately 180 km and will create minor permanent restrictions on land use in operation. Once installed, the buried cables limit certain activities directly above or adjacent to the trench.

Under Kazakhstan's electrical safety regulations (Order No. 330 of 2017), an underground cable line has a protected strip 1 m to each side of the cable. Now that the 35 kV cables are installed and buried, a corridor ~2 m wide along each cable route is subject to special conditions: no building of structures, no deep digging, and no planting of deep-rooted trees is allowed in that strip. The wind farm operator has the right to access these strips at any time for maintenance and must restore any disturbance if they dig up the cable for repairs. This is a very minor restriction within the site – effectively, it prevents the project itself from using that 2 m strip for any purpose other than grassland. Since the entire site is under project control and was already allocated for turbines, roads, and open buffer spaces, this rule has no impact on external stakeholders. It does not cause additional economic displacement to the community, because the land in question is already acquired and compensated. It will be allowed controlled grazing of sheep in parts of the site, which can be done safely over buried cables. In short, the MV cable safety zone is an internal technical buffer that does not affect any remaining land users (the impact of losing this land was accounted for when the site was acquired).

Outside the WPP Site

OHTL Protective Zones and Easements

In operation, each overhead line establishes an official protective zone along its route, per the Order of the Minister of Energy No. 253 (2015). These zones are the same widths discussed earlier (Minimum 30 meters horizontally on each side from the line's outer conductors so 60 m wide for 500 kV) and essentially codify the land-use restrictions for safety - no structures or residences may exist in the zone, and activities are limited to those compatible with an overhead line. Practically, this means that the land in the corridor remains as open space (fields, pastures) and cannot be developed. As noted, all affected landowners have been or will be granted compensation through servitude agreements for these limitations. For landowners, this represents a permanent economic displacement impact – they retain ownership but with reduced rights indefinitely. However, this impact is the same one identified under permanent land acquisition: the protective zone enforcement is exactly what the easement compensation was for. By the time of operation, each affected owner has already been compensated for the fact that their land is now subject to these restrictions. There is no new category of affected people in the operational phase; it is a continuation of the permanent displacement addressed above.It is important to highlight that no family should be living within an operational protective zone. The line routing was designed to avoid houses. Local authorities will also not approve any new construction in these zones going forward. Thus, it is not expected any physical displacement during operation (If a house had existed, it would have been dealt with before operation, as noted.) If the protective zone extends onto a parcel adjacent to the easement area – for example, if a line runs right along a property boundary, the zone might marginally encumber the neighbour's land – the Land Code ensures that neighbour also has a right to compensation. Extending the servitude to cover that portion or otherwise compensating the adjacent owner for any new restrictions on their use of land will be done. This scenario will be checked in the final surveying.

Legally, the project (through the grid operating company, e.g. KEGOC) holds public easements on all private lands under the OHTL routes. These easements (public servitudes) are the formal mechanism by which the protective zone rules are enforced. They require the landowner to "tolerate" the presence of the line and abide by the use restrictions (no buildings, etc.), and they guarantee the company's right of access for maintenance. In return, the owner receives compensation for the diminution of their property rights. If an easement "severely impedes" the land's use for the owner, Kazakh law allows the owner to request additional compensation or even a full purchase of the affected land. This legal safeguard aligns with IFC PS5/EBRD PR5's requirement to avoid leaving owners worse off. In the LRP, provisions for monitoring these cases will be provided – if, for example, an owner finds after some time that farming is no longer viable on the reduced/unusable portion of land, they can raise a claim and the project will coordinate a fair solution (which could be an extra payment or acquiring the plot).

Safety zones of windfarm

Wind turbines do not have a legislated off-site safety zone beyond the project's own boundary. In practice, the wind farm was sited such that the nearest village or dwelling is several kilometres away, and a minimum 100 m radius clear area is maintained around each turbine (this distance exceeds typical safety recommendations for noise and blade throw). Each turbine tower in operation will be enclosed by fencing at its base, preventing public access right next to the turbine. Operational displacement impact from wind turbines is not expected, because no one lives or works in close proximity who would need to move or alter their activities. Local residents remain at a very safe distance, and land immediately around turbines was already acquired. Grazing can continue up to the fence line of turbines on adjacent lands. The only caution is during winter icing conditions, when ice can shed from blades – herders will be advised (through community safety outreach) to keep a safe distance during those rare events, but this does not require any formal exclusion zone (herders are not expected to graze livestock on this land during winter, as grazing typically occurs in spring and summer). Therefore the wind farm's

presence does not impose additional restrictions on neighboring land use outside the fence. No additional households or land users are expected to be affected during operation apart from those already compensated.

Safety zone for BESS[3]

The Battery Energy Storage System is contained entirely within the WPP site, in a fenced compound. There are no specific off-site safety zones mandated by law for BESS; however, the project maintains an internal buffer (around 50 m) between the BESS and the site boundary for fire safety. No displacement impact related to the BESS in operation are expected. It is far from any settlement and does not restrict any community land. Herders can graze outside its fence just as before. The facility being secured and away from public areas means it poses no need for community exclusion zones beyond the site.

Protective zone for high voltage substations

Electrical substations (particularly high-voltage grid substations) have clearly defined safety zones under Kazakh law Order No. 330 (2017). The two 500 kV substations on site have a small protective zone (around 30 m) that technically should be kept clear for electrical safety and noise buffering. This 30 m zone lies mostly within the project's acquired land and just slightly outside the substation fence in a couple of places. The surrounding area is uninhabited open land. There is no operational displacement impact on external parties from the substations. No homes or farms are near enough to be affected by substation noise or EMF, and the land around the substation fence can be used for grazing in operation as before. Herders can graze right up to the fence however they cannot build anything in the immediate vicinity. Thus, operational safety requirements for the substations do not impose any new restriction on community land use.

[3] PROTECTED ZONES