Concept Environmental and Social Review Summary

Concept Stage

(ESRS Concept Stage)

Date Prepared/Updated: 03/28/2020 | Report No: ESRSC01156
### BASIC INFORMATION

#### A. Basic Project Data

<table>
<thead>
<tr>
<th>Country</th>
<th>Region</th>
<th>Project ID</th>
<th>Parent Project ID (if any)</th>
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<tbody>
<tr>
<td>Ukraine</td>
<td>EUROPE AND CENTRAL ASIA</td>
<td>P171980</td>
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| Project Name                                                                                      |
| Ukraine: Facilitating Power System Integration with Europe Project                                |

<table>
<thead>
<tr>
<th>Practice Area (Lead)</th>
<th>Financing Instrument</th>
<th>Estimated Appraisal Date</th>
<th>Estimated Board Date</th>
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<td>Energy &amp; Extractives</td>
<td>Financing</td>
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<tr>
<th>Borrower(s)</th>
<th>Implementing Agency(ies)</th>
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<tr>
<td>Ministry of Finance of Ukraine</td>
<td>Private Joint Stock Company &quot;National Power Company &quot;Ukrenergo”</td>
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#### B. Proposed Development Objective(s)

To establish a cross border power interconnection between Ukraine and EU, that strengthens competitive electricity markets in Ukraine and facilitates Ukraine’s power system integration with EU.

#### C. Summary Description of Proposed Project

The proposed Project will consist of the following three components: (i) Back to Back interconnect and network strengthening for ENTSO-E integration; (ii) introduction of battery storage; and (iii) technical assistance.

**Component 1: B2B interconnect and network strengthening for ENTSO-E integration (estimated cost: US$ 220 million).**

This component will finance the design, purchase, installation, and construction of the proposed B2B interconnection, which will allow electricity exchanges between European and Ukrainian electricity markets. The interconnect will be
developed, operated, and owned by Ukrenergo. The 600 MW capacity B2B station (2 units of 300MW), is proposed to be built on one of two proposed plots adjacent to the existing 750kV Zakhidnoukranska substation, located approximately 70 km south of the city of Lviv. The proposed B2B will be located at an electricity transmission hub on the border between Ukraine’s main grid and western part of the system, called Burshtyn Island (BI). BI is already synchronized with ENTSO-E systems. The proposed location of the interconnection is considered optimal, given land availability and blueprint of the power system. The proposed B2B station will consist of High Voltage Direct Current (HVDC) converter valves and its building, high voltage AC equipment such as transformers and circuit breakers, protection and control equipment and its building, and other auxiliary facilities. A short distance (less than one kilometer) of high voltage (330 or 750kV) transmission lines will be constructed to connect the B2B station to the existing Zakhidnoukranska substation. The proposed B2B station would require approximately seven hectares of land; two vacant plots adjacent to the 750kV substation have been identified for the proposed B2B station. It is found that one of the sites is owned by the newly created Amalgamated Territorial Community (Local Council), while the other is owned by Ukrenergo. Further review will be conducted to identify land transfer acquisition procedures and environmental and social impacts.

This component would also finance other necessary grid strengthening infrastructure, specific scope of which will be discussed and agreed with Ukrenergo during project preparation, to achieve the Ukrainian power system’s integration with Europe. Some examples of potential investments include reinforcements and expansion of transmission lines and substations, and upgrades of monitoring and control systems.

Component 2: Introduction of Battery Storage (estimated cost: US$ 40 million).

This component will support Ukrhydroenergo’s (UHE’s) new battery storage infrastructure, which could be combined with solar photovoltaic (PV) plants. The proposed battery storage and PV will contribute to satisfying the necessary frequency regulation reserves that Ukraine must prepare before the ENTSO-E synchronization, through provision of grid ancillary services. Both PV and battery storage will be installed within the precincts of the company’s hydro power plants (HPPs). The proposed PV plants will supply electricity to the battery storage facilities and also cater to auxiliary consumption within the HPP facility. The proposed battery storage facilities and PV plants will be developed and operated by UHE. The component will be designed in a manner that supports commercial arrangements between UHE and Ukrenergo for ancillary services. A preliminary feasibility study for the component has identified three HPP sites for the PVs and battery storages and those capacities, exact locations of the battery storage facilities and potential PV plants, as well as technical characteristics including capacity will be identified during the project preparation.


This component will support project supervision, management, and coordination and will build Ukrenergo and UHE’s capacity and experience in operating and maintaining the proposed B2B station and battery storage facilities. The component would consist of (i) project implementation support and coordination (US$ 4 million); (ii) capacity building and technical studies; and (iii) technical assistance on regulatory and commercial aspects. The first subcomponent (i) will support hire a supervision consultant for Component 1 to support Ukrenergo in overall project management and supervision including procurement, design, contract management, and preparation for operation and maintenance (O&M) of the completed investments. Additionally, it will include support for supervision and monitoring of the implementation of the Environmental and Social Management tasks including establish and maintaining of Grievance
Redress Mechanism. The subcomponent will also support Ukrenergo’s interaction with key stakeholders such as ENTSO-E to mobilize for EU integration. The second subcomponent (ii) would provide capacity building and training to Ukrenergo and fund system studies for integration with the European grid including technical studies to evaluate potential measures for the ENTSO-E integration; market modeling work to identify potential market inefficiencies; and assessment in capacity allocation methodologies for the interconnection. The third subcomponent (iii) will support studies, training, and advisory services on regulatory and commercial aspects of the proposed Project.

D. Environmental and Social Overview

D.1. Project location(s) and salient characteristics relevant to the ES assessment [geographic, environmental, social]
The back to back (B2B) station will be constructed in the vicinity of the existing 750kV Zakhidnoukraniska substation, located approximately 70 km south of Lviv, - currently the Borrower is assessing for this purpose two alternative options. One of the requirements is that the proposed B2B will be located at a border between Ukraine’s main grid and western part of the system, called Burshtyn Island (BI) and secondly – to be located in the proximity of the existing electrical grid. The area of the proposed location is owned by the newly administratively established Amalgamated Territorial Community (ATC) and will be reviewed further to identify land transfer acquisition procedures and environmental and social impacts. It consists of transformed natural habitats with abundant vegetation, - mostly trees, bushes and natural pastures. At the same time in the area of specified substation have been identified two valuable biodiversity sites: Emerald site ‘Dniester river valley in Lviv region’ (included in the list of EU Council Bern Convention), as well as the local zoological reserve ‘Dibrova’, which is adjacent the substation area. These sites are targeted at preserving forest vegetation that supports wide range of wildlife such as roe deer, hare, squirrel, fox, wild boar, black and common terns, common kingfisher.
The battery storages and PV plants under Component 2 will be built at few sites, located within the current footprint of two or three out of the seven UHE facilities (Kyiv; Kaniv and Kremenchuk, Srednedneprovskaya, Dnistrovska, Kakhovska HPPs, and Dnistrovska PHP). will be implemented country-wide. All these sites are within the boundaries of UHE’s properties along the dam/reservoirs, and do not encroach on grown forests, main customary walkways, customary recreation areas, customary waterfront utilization areas and accesses, sidewalks, roads, power lines or other infrastructure.

The territory of Ukraine is equal to 603,7 thsd. sq km or 5,7% of European territory. It neighbors Moldova, Romania, Hungary, Slovakia, Poland and Belarus from South, West and North Western side and Russian Federation from Eastern side. The territory from North to South is 893 km, from West to East-1316 km. The climate of Ukraine is temperate continental. Precipitation falls unevenly across Ukraine. The most rainfall is recorded in the Crimean Mountains and the Ukrainian Carpathian Mountains. The country consists almost entirely of level plains at an average elevation of 175 meters above sea level. Mountainous areas such as the Ukrainian Carpathians and Crimean Mountains occur only on the country’s borders and account for 5% of its area. Over 73,000 rivers flow through Ukraine. Ukrainian rivers mostly belong to the basins of the Black and Azov seas. Ukraine has a large network of valuable natural habitats, including four nature preserves- the Askaniia-Nova Biosphere Reserve, the Black Sea Biosphere Reserve, the Danube Biosphere Reserve, the Carpathian Biosphere Reserve and the Uzhanskyi National Nature Park as a constituent part of the trilateral East Carpathian Biosphere Reserve. Apart from that there are 17 national parks and 45 regional landscape parks in Ukraine.

From the social perspective, the enhanced energy supply through integration of Ukraine’s power system with European market is expected to bring several tangible benefits: (i) enhance reliability and resiliency of its electricity
supply to the population and the economy; (ii) diversification of energy sources that provide alternative options and opportunities for sustainable growth; (iii) improved transparency in mutual assistances; and (iv) increased competition in the domestic electricity markets. At this time, it is not clear if the Project may cause adverse impact to any vulnerable and disadvantaged groups, which will be assessed during preparation; measures will be developed so that the project would not cause adverse impact to them and extent benefits.

D. 2. Borrower’s Institutional Capacity

Component 1 will be implemented by the Private Joint Stock Company National Power Company “Ukrenergo”, whose ownership lies with the Ministry of Finance. Ukrenergo has been implementing the ongoing World Bank project: Second Power Transmission Project (P146788) as well as a number of projects financed by other international financial institutions (EBRD, EIB, KfW). Ukrenergo has a dedicated project team (PMU) comprised of qualified project manager, procurement specialist, financial manager, environmental and social specialists, and project accountant with extensive experiences in the World Bank and IFI projects, and a clear understanding of the World Bank’s fiduciary and safeguards policies and operating procedures. The PMU will be responsible for the preparation and implementation of this proposed Project, including preparation of project plans, procurement documents, progress reports, and management of all consulting and investment contracts, as well as hiring consultants for preparing the ESF documents.

Component 2 will be implemented by the joint-stock state-owned hydro power production company, Ukrhydroenergo (UHE). UHE has past experience working with the World Bank and other IFIs, including the World Bank’s Hydro Power Rehabilitation Project, Kaniv Hydro Power Plant Project (later dropped due to the lack of the donor coordination) and has qualified project manager, procurement specialist, financial manager, environmental and social specialists, and project accountants. A dedicated PMU will be established to execute Component 2 under the proposed Project.

Overall, the both implementing agencies have adequate knowledge and capacity for social and environment risk management. Although the implementing entities have some experience with working with IFI supported projects, they have no or limited capacity in applying the Environmental and Social Standards. As this is one of the first projects in the energy sector prepared under the Bank’s new Environmental and Social Framework (ESF), the client’s capacity to deliver an ESF based project is limited; therefore, capacity building training for the client including engaged agencies and contractors will be conducted by the Bank’s Environment and Social team during project preparation and implementation.

II. SCREENING OF POTENTIAL ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC) Substantial

Environmental Risk Rating Substantial

As specified above, the Component 1 will construct a new B2B station with associated short-distance transmission lines, while the Component 2 will install battery storages and potentially PV plants. These activities would have along with some positive economic and social impacts a series of environmental impacts and risks related to the following concrete activities: (a) establishment and operation of the construction camp; (b) hauling of construction materials; (c) civil works for construction of the B2B station and installing the battery storages; (d) impacts on biodiversity including on Emerald site and “Dibrovo” local zoological reserve; and, (e) soil resource management and erosion...
control activities. Overall the project will generate the following impacts: (i) dust and noise and emission of pollutants during construction activities; (ii) solid and hazardous wastes; (iii) degradation of soil and grass vegetation and potential impacts on fauna; (iv) direct impacts on natural habitats of the Emerald site and of local reserve Dibrovo as well as on the birds due to the construction of small segment of transmission line to connect the B2B station; (v) oil spills and leaks from the transformers and relevant facilities which may contaminate soil and water resources; (vi) occupational health and safety risks; (vii) moderate risk of DC electrolytic corrosion due to the electrode station; (viii) health risks due to handling of asbestos containing materials; of etc. Overall construction related impacts are likely to be short term and site specific and can be mitigated by applying internationally recognized best construction practices as well as by implementing the mitigation measures to be specified in the site specific ESMPs. At the same, taking into account the lack of capacity of the implementing agencies to ensure compliance with new WBF requirements, and, as at this stage of project design it is not known if the construction of B2B station will be located next to identified valuable biodiversity sites and, respectively, this might or not cause risks and impacts to them, it is proposed to qualify project environmental risks as “Substantial”.

**Social Risk Rating**

Social impacts and risks associated with the proposed Project emanate on three fronts: (i) construction related; (ii) local communities and stakeholders; and (iii) electricity consumers country wide. The first two types of impacts and risks could be identified and managed through appropriate ES measures. For the third aspect, while a tariff impact assessment will be conducted during the project appraisal, the impact is expected to be low. Based on the assessment results, additional social measures will be proposed, if necessary. No physical or economic displacement is anticipated under the project, even though a Resettlement Policy Framework (RPF) will be prepared during preparation for proper screening of project investments in light of ESS5 requirements and the development of a Resettlement Action Plan (RAP) in the unlikely event that physical or economic displacement occurs. The proposed Project’s stakeholders range from people living close to the project sites and beneficiaries/ electricity consumers in general and their interests, and their capacity to interface with the proposed project is diverse. The project does not expect issues arising from labor influx or GBV as the interventions are planned in existing sites and distant to human settlements. Proposed B2B station is to be constructed in a land belong to local authority but require social screening/assessments to ensure that this land plot has no legacy issues or encumbrances. As far as client capacity in social risk management, both implementing agencies (UE and UHE) have prior experience in managing social risks associated with energy projects implementation. However, this is the first time these agencies are going to work with the Bank financed interventions under new Environmental and Social Framework, and therefore applying the ESF standards will be a challenge. The investments proposed in the selected sites are mutually exclusive and no ‘associated facilities’ related issues identified.

ES documents, to be prepared for this project, will include Labor Management Procedures (LMP) and Stakeholder Engagement Plan (SEP) and will take into account coordination and consultation with project affected people, workers of UE and UHE and other stakeholders according to ESS 2, ESS 5 and ESS10. The project-level Grievance Redress Mechanism (GRM) will be established and operationalized throughout the project life, as part of a stakeholder engagement plan. Based on the above, the social risk is considered to be moderate.

**B. Environment and Social Standards (ESSs) that Apply to the Activities Being Considered**

**B.1. General Assessment**

ESS1 Assessment and Management of Environmental and Social Risks and Impacts
Overview of the relevance of the Standard for the Project:

This standard is relevant as the project will generate a series of adverse environmental risks and impacts. For the Component 1 activities these might include the following: (i) dust and noise and emission of pollutants during construction activities; (ii) solid and hazardous wastes; (iii) degradation of soil and grass vegetation and potential impacts on fauna; (iv) direct impacts on natural habitats of the Emerald site and of local zoological reserve Dibrovo as well as on the birds due to the construction of small segment of transmission line to connect the B2B station; (v) oil spills and leaks from the transformers and relevant facilities which may contaminate soil and water resources; (vi) risks of exposure to unconfirmed health effects from electric and magnetic fields; (vii) occupational health and safety risks; (viii) moderate risk of DC electrolytic corrosion due to the electrode station; (ix) health risks due to handling of asbestos containing materials; etc. The magnitude of impacts (especially, impacts on biodiversity and OHS impacts) will be identified during project preparation stage and while conducting site specific ESIs.

For the proposed construction of battery storages and PV plants under Component 2, potential environmental and social impacts will be associated with small scale civil works and would be less complex and significant, including the following: construction solid wastes; noise; soil and air pollution; labor safety issues; risks of fires; etc.

To address specified environmental and social impacts the Borrower will prepare a unified Environmental and Social Assessment (ESA) report which will provide the details of the project ESA for both project components, which are quite different. As at this stage of project design for the location of the B2B station and of short Transmission Line under Component 1 are proposed two alternative sites in proximity of the existing 750kV Zakhidnoukraniska electrical substation, the Borrower will conduct a site specific ESIA and prepare an ESMP, which must include a detailed Biodiversity Assessment and analysis of the location alternatives. This is because in the area of proposed locations for the B2B station there are two biodiversity valuable sites, - Emerald site included in the list of Bern Convention and Dibrovo zoological reserve and the project activities might affect them. The ESIA&ESMP document will describe all potential environmental and social risks and impacts associated with the construction of B2B station, including those on Biodiversity sites, - for both construction and operational phases. Based on that it will be prepared a site specific ESMP that would include detailed mitigation and monitoring activities, along with the detailed implementing arrangements. Furthermore, this section of the ESA report will provide an assessment of UE environmental management at national and local level and identify capacity building activities in terms of ensuring an efficient ESMP implementation and in compliance with the WB ESSs requirements, with a focus on OHS issues. In the case if the selected location for the proposed station will generate serious adverse impacts on natural habitats and living organisms, the ESIA&ESMP document will include a special Biodiversity Management Plan. Lastly, - for the B2B construction the ESMF will also ask the selected Contractor to prepare operational management plans, before mobilization and commencement of construction works, to be approved by the PMU and Ukrenergo.

As specified above currently it is not known how many battery storages and PV plants will be constructed as well as no locations for them have been identified. Respectively, in accordance with the ESS1 for addressing potential risks and impacts of proposed under Component 2 activities the Borrower will prepare an Environmental and Social Management Framework (ESMF), which will specify rules and procedures for the activities and subprojects’ Environmental and Social Impact Assessment (ESIA) and for preparing adequate Environmental and Social Management Plans (ESMPs). The main goal of the ESMF will be to define the measures, ways and mechanism for avoiding, minimizing and/or mitigating potential negative environmental and related social impacts that may occur as the result of construction of battery storages and PV plans. The ESMF will ensure that the identified subprojects in the course of project implementation will be correctly assessed from environmental and social perspective to meet WB’s Environmental and Social Standards alongside with country’s Environmental and Social Laws and Regulations. The ESMF will guide the ESIA process and in this regard will cover the following: (i) guidance for conducting
subprojects ESIA and/or preparing simple ESMP or ESMP Checklist which including monitoring plans; (ii) mitigation measures for possible impacts of proposed subprojects; (iii) overview of the capacity of PMU and all other involved in ESMPs implementation parties for environmental and social risk management and measures to fill any gaps in capacity. The ESMF will also specify the site-specific ESMP documents will be included in the contractors’ bid documents along with Environmental Codes of Practice for Construction (ECPs). Furthermore, the ESMF will provide and will require the main environmental requirements based on the best industry practices and World Bank Environment, Health and Safety (EHS) guidelines. Respectively the ESMF will ask that the contractors will be required to follow the ESMPs and EHS guidelines and use them to prepare their management plans. As per ESSs requirements the unified ESA document will be disclosed and consulted with all interested parties and local population.

Construction related social risks and impacts are limited as Component 1 will be implemented in locations distant from human settlements. Component 2 may be implemented near residential areas, and if that is the case some limited health and safety related issues may occur to local population.

It is not clear if the Project may cause adverse impact to any vulnerable and disadvantaged groups, which will be assessed during preparation and measures will be developed so that the project would not cause adverse impact to them and extent benefits to them.

**Areas where “Use of Borrower Framework” is being considered:**

Due to the existing discrepancies between WB ESSs and National legal framework for Environmental and Social Assessment the Borrower’s Framework will not be used.

**ESS10 Stakeholder Engagement and Information Disclosure**

The standard is relevant. Stakeholder engagement is key to the success and sustainability of the project development objectives.

Project design involves multiple stakeholders both project affected and other interest groups: Project affected parties include the Ministry of Finance, Ministry of Energy and Environment, National Energy Regulation Commission and other agencies involved with different project components; iii)UkrEnergo; iii)UkrhydroEnergo, and potential project affected persons (local amalgamated community-owner of the land plot) should there be any.

Other interested parties include international donors supporting energy projects, civil society organizations, and NGOs interested in energy reforms in the country. In order to ensure that a consistent, comprehensive, coordinated and culturally appropriate approach is taken to stakeholder engagement and project disclosure, the Borrower will conduct a stakeholder analysis/screening prior to appraisal and prepare a draft Stakeholder Engagement Plan (SEP).

The SEPs will be developed and implemented with the participation of potentially affected parties to ensure that stakeholder engagement is conducted on the basis of timely, relevant, understandable and accessible information (both format and location The SEPs will identify both other interested parties (OIPs), various beneficiaries and directly impacted project affected persons (PAPs), including disadvantaged and vulnerable groups, if any, and will include measures to ensure that the project would engage with each categories of stakeholders meaningfully.

The project will also design a project-wide grievance redress mechanism (GRM) which will enable stakeholders to channel concerns, questions, and complaints to the PMUs (and where necessary to other actors at the local level). The GRM will be multi-faceted, to receive inputs from communities, and external stakeholders and respond to issues related to a broad range of project implementation issues. A channel for confidential reporting and redress mechanisms for gender-based violence (GBV) issues (although they are unlikely to occur) will also be laid out. The GRM to be designed prior to appraisal will define ways in which users can submit their grievances, which may include submissions in person, by phone, text message, mail, email or via a web site; will include a log where grievances are
registered in writing and maintained as a database, publicly advertised procedures, setting out the length of time users can expect to wait for acknowledgement, response and resolution of their grievances, transparency about the grievance procedure, governing structure and decision makers; and an appeals process (including the national judiciary) to which unsatisfied grievances may be referred when resolution of grievance has not been achieved. All ES documents, including the SEP, will be disclosed locally and through the external website of the Bank before appraisal. Draft SEP will be disclosed earlier in the project preparation process.

B.2. Specific Risks and Impacts

A brief description of the potential environmental and social risks and impacts relevant to the Project.

ESS2 Labor and Working Conditions

This standard is relevant. Project work force will include direct workers (UE and UHE staff and consultants), and contracted workers (employees of civil works contractors and sub-contractors). At this stage of project design it is expected no community workers or primary suppliers involved under the project (this will be reassessed during the project design as the project might involve primary suppliers as the result of obtaining construction materials). The borrower will prepare the Labor Management Procedure (LMP) to be applied for each component outlining the expected number and type of workers, include relevant measures to promote employment of female workers, key gaps between national legislation and regulations that need to be addressed at the project level, as well as monitoring and supervision arrangements. Key aspects of the LMP pertaining to contracted workers, such as Occupational Health and Safety (OHS), adequate working conditions, adequate living conditions in the unlikely event of work camps, a functioning grievance and redress mechanism for workers, will be included in Contractors’ ESMP. Bidding documents will make explicit reference to these aspects and the works contractor, when selected, will prepare a contractor’s labor management procedure (C-LMP) to meet the requirements of ESS2, based on the template provided in the LMP. The task team will review the borrower’s internal HR procedures to ensure consistency with ESS2 requirements and propose any gap filling measures. Ukraine’s legislation on labor and working conditions is relatively advanced. The Labor Code includes measures on equal opportunity and non-discrimination, regulates hiring and firing procedures, allows for collective organization and bargaining; however, it lacks the requirement to establish worker’s grievance mechanism. Such mechanism will need to be established at project level.

ESS3 Resource Efficiency and Pollution Prevention and Management

This standard is relevant. The expected environmental risks are associated with handling and storage of construction material, waste, excessive noise and vibrations, dust emissions, and disposal of hazardous waste such as asbestos, lubrifiants and oil, as well as with OHS issues. The ESIA/ESMF document will include a section on Pollution Prevention and Management, with a focus on those issues which might arise while conducting civil works, installing electrical equipment, battery storages and construction potentially PV plants. The issues specified under the ESS3, including raw materials, water use, air pollution, hazardous materials, and hazardous waste will be presented in the site specific ESMP for Component 1 and ESMF and requested to be included in the site specific ESMPs for Component 2, as relevant, and further being part of bidding documents. Required building material will potentially include stones, sand, concrete blocks and timber. Borrow material will be obtained from already existing and licensed borrow pits within Ukraine and possibly close to the project area to
reduce the transportation distance. Should there be the need to open new borrow pits, the project shall ensure that all national regulations and assessments and permitting requirements are adhered to and pits reinstated as may be required through the site-specific ESMP. Air emissions will include exhaust from heavy vehicles and machinery, and fugitive dust generated by civil works for rehabilitation or reconstruction activities. Those most likely to be affected are construction workers, facilities’ staff, and people living in areas close to the construction sites. Mitigation measures such as dust suppression, vehicle maintenance etc., will be applied to minimize the impacts and residual impacts are expected to be limited in scope and duration.

Noise will likely be generated from use of construction machinery and vehicle movements. The relatively short-term and small-scale nature of the works (but for B2B construction) suggest that noise levels will in most cases not be excessive. Liquid and solid waste will mainly include excavated soil, oils from construction machinery etc. Waste will be segregated, stored and disposed at approved sites. The collection, transportation, and disposal of hazardous wastes from the construction activities (mainly oils from construction machinery and lubricants, if any) will be disposed at the designated hazardous waste disposal site of Liviv oblast and the ESIA&ESMP document will provide a brief summary on its current performance and, if needed, measures for ensuring their safe disposal. The borrower shall commit to require from the selected works contractors for B2B station to developing detailed Waste Management Plans prior to entry of site, approving it in consultation with the World Bank, and enforcing its implementation by the contractor.

**ESS4 Community Health and Safety**

This ESS is relevant. While the Component 1 activities, namely construction of B2B station, will be located far from the residential areas and respectively no community health and safety impacts are anticipated, the proposed activities under Component 2 on installing battery storages and potentially PV plants that might be located near the residential areas might cause a series of impacts to communities such as: noise, traffic disruptions; access restrictions; fires; etc. To address these risks and impacts, the ESMF document for Component 2 will require that EES systems in locations close to, or within, residential areas will strictly follow applicable fire safety regulations. Therefore, the systems in such areas shall be fitted with adequate additional protection and risk mitigation systems. Applicable building safety arrangements, e. g. safety of wall structures, emergency exits, fire-proof walls and safety distances, emission control and containment systems, fire trucks access roads, etc. as specified in the WB and national standards, should be taken into consideration. All these risks and impacts will be assessed prior as part of site specific ESIA and relevant mitigation measures included in the ESMPs. Partition of construction area by putting in place fences, signaling, mitigation measures to control excessive noise and dust levels, and secure access to the area in the building for the workers will be ensured through a robust mitigation and management plan in the proposed ESMPs or site-specific ESMP Checklists. Public awareness sessions, in particular related to H&S and EMF risks, will be organized in all local communities prior to beginning of works. Labor influx and GBV risks: If workers camps need to be built, the contractor will be required to employ measures to control labor influx risks based on international good practice. Workers will be made aware of and adhere to a code of conduct. WB’s EHS Guidelines for Electric Power Transmission and Distribution will be used for carefully assessed and used particularly to address risks related to right of way (ROW) management, EMF, OHS and community health and safety.

For the B2B station for its operational phase, the emergency protocols will be prepared and approved. They will cover personnel actions in case of emergency, alert mechanism and necessary training for personnel and communities, if needed. The project would assess the existing practice of implementation agencies regarding the use of security force and, if any gaps are found, develop necessary steps in the ESMPs to ensure material consistency with the ESS4.
ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

This standard is relevant. The proposed B2B station under component 1 may require approximately seven hectares of the land owned by the local council (newly administratively established Amalgamated Territorial Community). The 600 MW capacity B2B station (2 units of 300MW), is proposed to be built on a plot adjacent to the existing 750kV Zakhidnoukranska substation, located approximately 70 km south of the city of Lviv. The proposed B2B will be electrically located at a border between Ukraine’s main grid and western part of the system, called Burshtyn Island. The initial social screening and consultation with the representatives of the client revealed that there are no built structures other than trees and other non-economical plants. The above-mentioned land pot is ‘communal’ and no private ownership as such. However, since the sites are not being finalized yet, and in order to ensure that sites are selected without ownership deputes, legacy issues or any other encumbrances including informal users, Resettlement Policy Framework (RPF) will be prepared during the project preparation to address any issues relevant to ESS 5. A Resettlement Action Plan (RAP) will be prepared, if deemed necessary, following procedures provided in the RPF.

The proposed investment under component 2 aims to install battery storages and potentially PV plants within current footprint of the UHE facilities. The proposed battery storage facilities will provide ancillary services and also cater to auxiliary consumption within the HPP facility.

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

This ESS is relevant as the location of B2B station may be in the vicinity of the valuable biodiversity sites, natural habitats that carry important living organisms (Emerald site included in the Bern Convention list and Dibrovo zoological reserve) and the project activities might affect them. In this regard, the site specific ESIA and ESMP document for Component 1 will: (a) include a detailed Biodiversity Assessment, which would indentify importance of the affected forest/other type of ecosystems, including for supporting populations of rare/threatened animal and plant species; (b) based on Biodiversity Assessment will be confirmed the presence/absence of critical habitats within the selected location; (c) in the case the selected location will include a “critical habitat” the Biodiversity Assessment will (i) exclude such location from project activities; or provide detailed explanation why the proposed location is only possible and best option, - responding to all requirements of the ESS6; (d) in the case the construction of B2B station will generate significant impacts to natural habitats and living organisms, the ESMP will include a special Biodiversity Management Plan wichi will include monitoring, implementing arrangements and budgetary requirements for its implementation.

As construction of battery storages and PV plants under Component 2 will be located within the current footprint of the seven UHE facilities, it is not expected these investments will generate any impacts on the natural habitats and living organisms. The final location of B2B station, of battery storages and of PV plants will be adjusted to avoid/minimize impact on the natural habitats. During the selection of these sites, as part of environmental assessment will be included also identification of potential such impacts and in the case of some minor impacts mostly on vegetation that might be on sites, adequate mitigation or compensatory measures will be included in site specific ESMP as relevant.
ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities
Not relevant to this project. No identified indigenous groups or ethnic minorities in the area covered under the project.

ESS8 Cultural Heritage
This standard is not relevant. Proposed under Component 1 construction works will be carried out in outside the residential areas and no CH sites will be impacted. The Component 2 activities, while they may be located in the urbanized areas, potentially might affect such sites, the project will not support any subprojects which may generate such impacts, - they will be excluded from project financing during the preliminary screening. As precautionary measure, all subprojects that will have earthmoving activities will include the “chance findings” procedure.

ESS9 Financial Intermediaries
The project will not use FIs.

C. Legal Operational Policies that Apply

| OP 7.50 Projects on International Waterways | No |
| OP 7.60 Projects in Disputed Areas | No |

III. WORLD BANK ENVIRONMENTAL AND SOCIAL DUE DILIGENCE

A. Is a common approach being considered?
No

Financing Partners
No other financing partners.

B. Proposed Measures, Actions and Timing (Borrower’s commitments)

Actions to be completed prior to Bank Board Approval:
1. Prior to project appraisal, preparation of Environmental and Social Commitment Plan (ESCP).
2. Prior to project appraisal, conducting detailed Biodiversity Assessment for selection of the site for B2B station construction and preparation of unified ESA report which would cover site specific ESIA&ESMP section for Component 1 and an Environmental and Social Management Framework for Component 2 activities.
3. Prior to project appraisal, preparation of Resettlement Policy Framework (RPF)
4. Prior to project appraisal, preparation of a Stakeholder Analysis/Screening and Stakeholder Engagement Plan (SEP).
5. Preparation of the Labor Management Procedure (LMP) outlining project related workers and labor rights and grievance management system for workers, if needed.

Possible issues to be addressed in the Borrower Environmental and Social Commitment Plan (ESCP):
1. Monitoring the progress made on implementing the agreed measures for mitigating environmental and social risks.
2. Implementation of SEP.
3. Establishment and operationalization of Project-level GRM.
4. Preparation and implementation of Labor Management Procedures (LMPs) and/or Grievance Mechanism for all Direct and Contracted Workers.
5. Preparation and implementation of site-specific ESIA and related ESMP for Component 2 activities.
6. Preparation and Implementation of RAP, if necessary.
7. Maintaining through project implementation E&S institutional capacity.

**C. Timing**

Tentative target date for preparing the Appraisal Stage ESRS 16-Jun-2020

**IV. CONTACT POINTS**

| World Bank |
|-----------------|-----------------|-----------------|
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**VI. APPROVAL**

Task Team Leader(s): Sandeep Kohli, Koji Nishida
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<th>Role</th>
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<th>Status</th>
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<tbody>
<tr>
<td>Practice Manager (ENR/Social)</td>
<td>Gulana Enar Hajiyeva</td>
<td>Recommended on 04-Mar-2020 at 23:02:56 EST</td>
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