“HIGH VOLTAGE ELECTRIC NETWORKS”
CLOSED JOINT STOCK COMPANY
(Transmission network)

A RELIABLE PARTNER, RELIABLE SYSTEM

International Energy Charter Forum
June 16, 2021  Yerevan, Republic of Armenia
“High Voltage Electric Network” CJSC infrastructure

-十三个变电站 220 kV
-两个变电站 110 kV
-一个Agarak切换点
-330, 220, 110, 10 և 6 kV TL - 1915.41 km
-风力发电场 – 2.64 MW
High voltage substation rehabilitation projects

From 2001 up to 2014 220/110kV Vanadzor-2, Kamo, Alaverdi-2 and Gyumri-2 substations have completely been rehabilitated with financial support from German KfW bank.
Out of 6 substations rehabilitations funded by IBRD, ADB and HVEN CJSC own means 220kV Haghtanak substation has been put into operation in 2019, 220kV Ashnak – 2021

Up to the end of this year 110kV Vanadzor-1 substations are planned to put into operation.

220kV Shinuhayr and 110kV Charentsavan-3 substations as well as Agarak Switching point are planned to be commissioned on 2023.
High voltage substations rehabilitation projects

- Rehabilitation works on 220kV Lichk substation are commenced and the commissioning is foreseen on 2022.

- Rehabilitation of 220kV Ararat-2 and Zovuni substations are initiated with the financial support from IBRD. Commissioning is planned on 2024.

- 220kV Egheghnadzor, Shahumyan-2 and Marash substations are planned to be rehabilitated in future.
Expected results of high voltage substations rehabilitation

By rehabilitation of 220 kV “Eghegnadzor”, “Shahumyan” and “Marash” substations the whole modernization process will be finalized which will bring to:

• Increase of energy system reliability,

• Decrease of losses in energy system,

• Uninterrupted power supply to consumers.
High voltage 220kV TL rehabilitation projects

• With financial support from IBRD app. 230 km Noraduz – Lichk – Vardenis – Vayq -Vorotan-1 220kV TL, connecting Hrazdan TPP with Shinuhayr substation and app. 50 km Lalvar - Noyemberyan 110kV TL had been successfully put into operation.
Iran-Armenia 400kV third TL (270km) and 400/220/20kV Noravan substation project is being performed with financial support from EDBI. It is planned to put the TL and substation into operation on 2022.
Regional cooperation development projects

Caucasus Transmission Network (Armenia-Georgia transmission lines / Substations) project is being implemented with the financial support from German KfW bank.

The Project Phase I+IIa includes the following:

- 500/400kV HVDC converter station with 350 MW in Ayrum,
- App. 8km 500kV TL from Ayrum up to Georgian border,
- 400/220kV Ddmashen substation,
- On double circuit towers app. 100 km 400kV single circuit TL from Ddmashen to Ayrum substation.

Completion of Project Phase I+IIa - 2025
Expected results of high voltage network rehabilitation

- **Increase of the reliability of power system and the level of energy security and independence,**
- **Decrease of losses in power system,**
- **Increase of power transmission capacity of Iran-Armenia TL from 300 MW to 1000-1200 MW,**
- **Increase of power transmission capacity of Armenia-Georgia TL from 200 MW to 350 MW**
- **Increase of integration with neighboring countries and transit possibility.**
Thanks