



## Trans-Balkan Electricity Corridor (I): Grid Section in Montenegro

### **Partners:**

- Montenegro Electricity Transmission Company (CGES a.d.)
- Ministry of Finance, Montenegro

### **EU** contribution:

- €25 million (20% of investment cost)
- €2.2 million (project identification and preparation costs)

## Estimated total investment:

• €127 million

### **Estimated KfW loan:**

• €25 million

### Estimated EBRD loan:

• €60 million

# Beneficiary contribution and other grants:

• €17 million

This project contributes to the establishment of a Western Balkans regional electricity market through the creation of a 400 kV transmission corridor between Montenegro, Serbia and Bosnia and Herzegovina. The corridor would be further linked to the European Union via the Italy – Montenegro submarine cable.

The investments in Montenegro comprise the construction of a new 400 kV transmission line from Lasta to Pljevlja and then to the border with Serbia, including the construction of a new substation in Lastva, the grid connection from Lastva substation to the existing 400kV Podgorica – Trebinje line, and the upgrade of the 400/220/110 kV substation in Pljevlja. The project include the cost of dismantling the existing 220 kV overhead lines between the substation in Pljevlja and the Montenegro/Serbia border.



3D representation of the new 400/110/35 kV substation in Lastava.

#### **Results:**

- Montenegrin power transmission system integrated into the wider European energy market.
- Approximately 165 km long 400 kV overhead transmission line from Lasta to Pljevlja and then to the border with Serbia.
- A new 400kV substation in Lastva and upgraded substation in Pljevlja.



View of existing 400 kV transmission lines along the Trans-Balkan Corridor.

Energy



Existing and planned transmission corridors in Montenegro.

### Start Date:

August 2016

#### **Estimated End Date:**

End of 2022

## Estimated Loan Repayment Period:

12 years

The planned investments will reduce CGES's operational and maintenance costs. They will also help normalise voltage levels, stabilise load flows and frequency fluctuations, and decrease technical losses in the overall transmission system. The project will thus improve the quality and security of the electricity supply to Montenegro and the wider region.

The investment in Montenegro will be coordinated with similar projects in Serbia and Bosnia and Herzegovina: construction of new 400kV overhead transmission lines in Serbia and Bosnia and Herzegovina; decommissioning of existing 220kV lines in Serbia; and upgrading of substations in Bajina Bašta (Serbia) and Višegrad (Bosnia and Herzegovina). The entire corridor is expected to be completed by 2023.

The European Commission, together with KfW Development Bank and the European Bank for Reconstruction and Development, provided financial assistance for project identification and preparation, under the Western Balkans Investment Framework.

The feasibility study and preliminary conceptual designs for the Montenegrin project were completed in early 2015. No population resettlement will be required since the new facilities will be built on, or in the vicinity of, existing transmission corridors.

Specific mitigation measures have been identified for sections where the new investment may lead to forest fragmentation, with potential knock-on effects on the fauna and flora.

### **Benefits**

- Social welfare benefits associated with the investment on the Montenegrin part are estimated at €7.5 million in 2018 and €5 million in 2023.
- Reduced transmission losses and additional electricity generators on the grid, leading to lower electricity prices for residents, industry and investors.
- Secure power supply in Montenegro by eliminating overloads in the system and so reducing outages.