Southeast Europe Cooperation Initiative Transmission System Planning Project (SECI) [1]

Energy Technology and Governance Program
The Southeast Europe Cooperation Initiative (SECI) Transmission System Planning Project

The Southeast Europe Cooperation Initiative (SECI) Transmission System Planning Project was established by the United States Agency for International Development in 2001 with the objective to promote regional cooperation in transmission planning through the development of common transmission planning tools and methodologies. Members of the project working group represent the transmission system operators (TSO) of Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Kosovo, Macedonia, Montenegro, Romania and Serbia. Neighboring TSOs from Turkey, Hungary, Slovenia, Greece and Italy participate in the project in a support role.

The SECI Working Group developed the first detailed national and regional steady state, dynamic and short circuit models of the high voltage network for the planning horizons of 2002 and 2005 winter peak and summer minimum conditions. Subsequently, similar national and regional models were developed for 2010, 2015 and 2020. These models are used to identify bottlenecks to regional trade of electricity; model the impact of the transmission network on energy security initiatives; determine the potential to integrate renewable energy resources; and identify network investment requirements.

Studies conducted by the SECI Working Group include:

- Reconnecting Southeast Europe to ENTSO-E Network
- Generation Investment Requirements in Southeast Europe
- Transmission Investment Requirements to Sustain Markets
- Prioritizing Transmission Investment Criteria
- Technical Uncertainties for TSOs in a Competitive Market Model
- Preparation for Large Scale Wind Integration in the Southeast European Power System

The SECI Working Group has had a consistent membership over the life of the project. It is the steward of the regional models, updating them on a quarterly basis to ensure accuracy as national networks and energy plans change. Through the studies conducted by the SECI Working Group, the project has helped leverage several transmission investments in the region including the following lines:

Completed/Approved in 2010/2011

- Croatia-Hungary: 2x 400 kV line Ernestinovo - Pecs: in operation Mar 2010. SECI evaluated it as the most important regional interconnection candidate line. Cost: ~45 M€ (86 km)
- Kosovo-Albania: 400 kV line Tirana 2 ? Prishtina, 500 MW. Bid evaluation is completed. The contract agreement should be established within the end of this year and implementation period is expected to be 2 years. Cost: 75.5m €
Expected completion: 2014

- Albania-Macedonia: 400 kV line Elbasan 2 – Bitola: MoU signed between OST and MEPSO to work jointly towards finalizing the project. The WBIF approved the Feasibility Study and the ToR prepared and approved. Cost estimate: 30 M€

Expected completion: 2015

- Montenegro-Italy: HVDC submarine 400 kV line Tivat - Foggia: MoU between two Governments in 2007, followed by the Agreement in 2010 and binding contract on capital increase of CGES by Terna and HVDC project realization. Cost: 860 M€

Expected completion: 2016

- Serbia-Romania: 2x400 kV line Pancevo – Resica, Preparation study accomplished. Financing still not prepared. Should be realized in few phases, depending on construction of connecting substations in Romania (Sokol) and Serbia (Vrsac). Cost of Serbian part (76 km): 16 - 24 m€

Expected completion: 2020

- Albania-Italy: HVDC 400 kV line Durres - Foggia: Feasibility study prepared. Few independent ideas and potential investors (wind park, thermal power plant, TSO, traders...) Cost: N/A

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