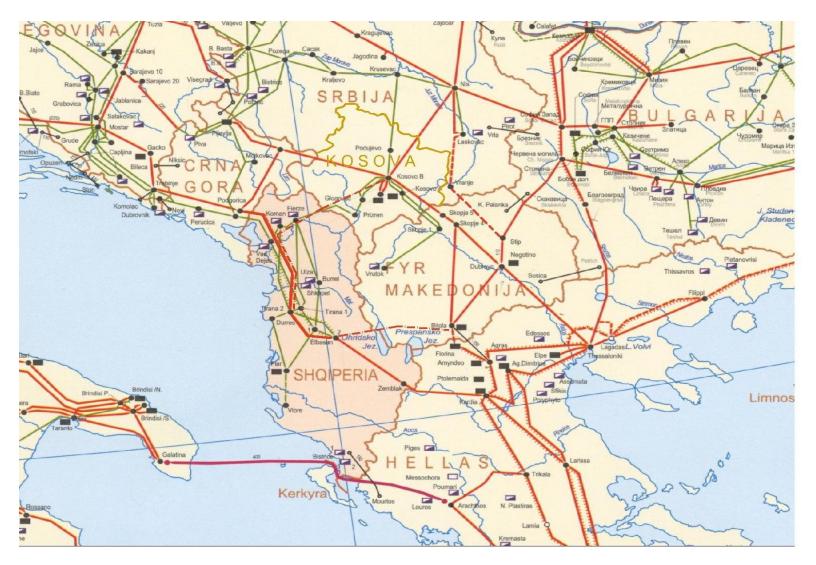


An Overview
of the Albanian TSO,
and
Cross-border trading and
allocation of capacities

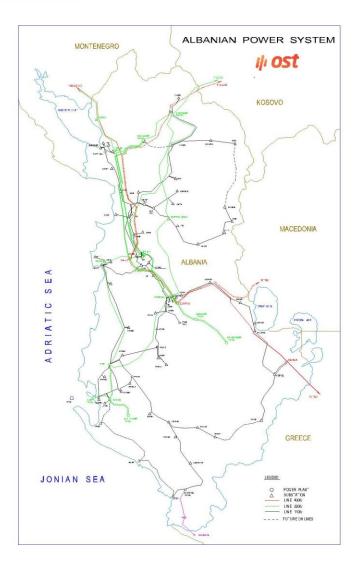


Il OST Albania's Regional Interconnections





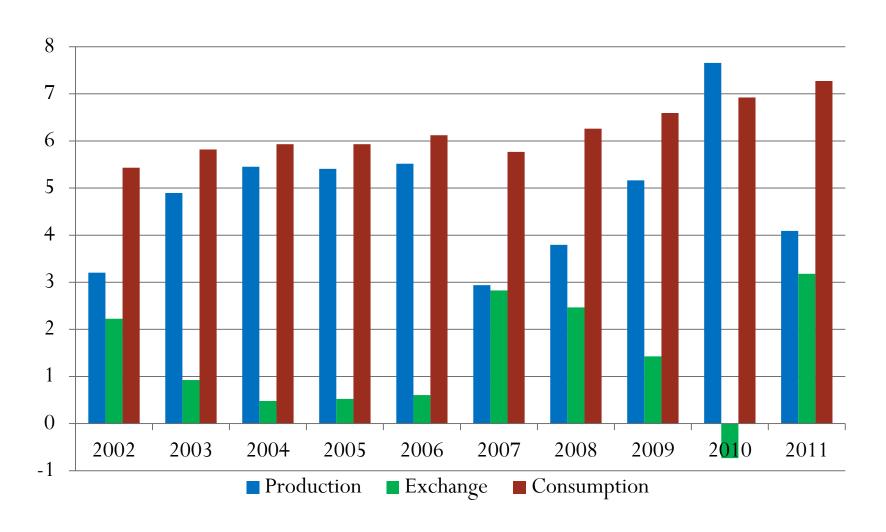
Transmission Network & Key Figures (2011)



- Number of substations:
 - >2 (400/220 kV),
 - ≥1 (400/110 kV),
 - ►12 (220/110 kV).
- Length of lines:
 - >294 km (400 kV),
 - >1,128 km (220 kV),
 - >1,251 km (110 kV).
- System Peak Load:
 - >1,050 MW in summer season,
 - ▶1,400 MW in winter season.
- •Interconnection capacity:
 - >2,600 MVA (~2,210 MW).
- APS installed power:
 - > Hydro 1,450 MW,
 - > Thermal 100 MW.



Production, Exchange, Consumption, in TWhs, during last 10 years





New Projects in Transmission System

- > New National Dispatching Centre,
- Rehabilitation of existing 400/220 kV and 220/110 kV Substations,
- The reinforcement of the 400/110 kV Zemblak substation, and the development of the 110 kV network in Southern part of Albania,
- ➤ The construction of the new 400 kV Interconnection line Albania Kosovo.



The Market Players in Albania

State—owned Transmission System and Market Operator (OST)

Power Corporation
(KESH) which holds
the licenses for
generation (KESH
Gen) and Wholesale
Public Supplier (WPS)

Operator (CEZ Shperndarja or "CEZ") which also holds the license for Retail Public Supply (RPS)

Independent Power
Plants that operate
small hydro power
plants.
Qualified Suppliers
and Wholesale
Electricity Traders



The Market Operator operation

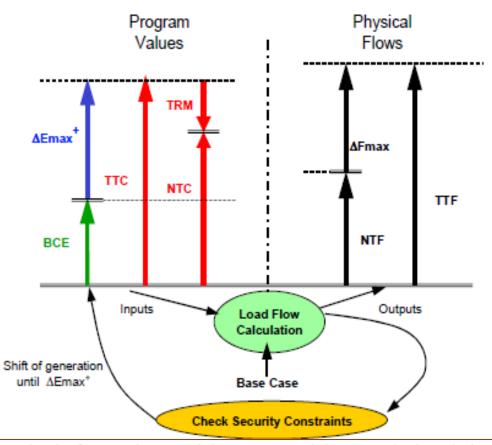
- Collection and processing nomination data from market participants,
- Collection and processing metering data,
- Manage the Settlement statement process,
- Maintain financial obligation for ancillary services and transmission losses,
- Service of Interconnection Capacity Allocation

The AMM stipulates that the ancillary services pricing will be cost based, however the pricing rules are not provided in concrete terms. Actually, Ancillary Services are provided by KESH without a market mechanism, due to a lack of explicit prices for ancillary services and real time balancing energy.



Transfer capacity definitions and calculation

- ➤ Total Transfer Capacity (TTC)
- ➤ Net Transfer Capacity (NTC)
- ➤ Transmission Reliability
 Margin (TRM)
- ➤ Already Allocated Capacity (AAC)
- ➤ Available Transfer Capacity (ATC)
- Notified Transmission Flow (NTF)



Especially NTC and ATC are an important basis for market participants to anticipate and plan their cross-border transactions and for the Transmission System Operators (TSOs) to manage these international exchanges of electricity.



Transmission Capacities for February 2012

| Pordor | Direction | Capacity | Period |
|----------------------|-----------|----------|----------------|
| Border | Direction | [MW] | 1-29, 02, 2012 |
| Albania - Kosovo | AL -> KS | TTC | 260 |
| | | TRM | 50 |
| | | NTC | 210 |
| | KS -> AL | TTC | 260 |
| | | TRM | 50 |
| | | NTC | 210 |
| | AL -> MN | TTC | 450 |
| Albania - Montenegro | | TRM | 100 |
| | | NTC | 350 |
| | MN -> AL | TTC | 450 |
| | | TRM | 100 |
| | | NTC | 350 |
| Albania - Greece | AL -> GR | TTC | 350 |
| | | TRM | 100 |
| | | NTC | 250 |
| | GR -> AL | TTC | 350 |
| | | TRM | 100 |
| | | NTC | 250 |



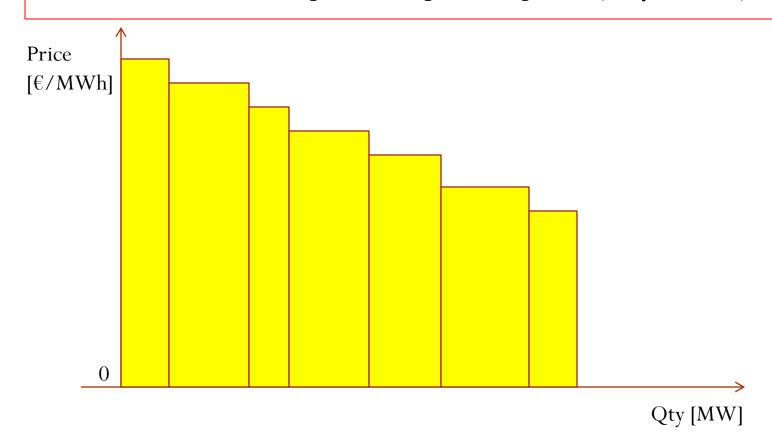
Method of allocation of rights to use ATC

- Memoranda concluded with adjoining TSOs for:
 - NTC, ATC evaluation and convening
 - 50%:50% sharing of allocation responsibility on each direction
- ATC Allocation Procedure approved by ERE and published on the web site: www.ost.al
- Explicit auction on each border on the Albanian side
- The overall procedure covers the following steps:
- 1. Determining and publishing the available transfer capacity
- 2. Preparing and submitting the offers based on the standard offer template
- 3. Performing the Cross-Border Auction
- 4. Results dissemination
- 5. Nominating the Cross-Border Capacity Rights of Usage



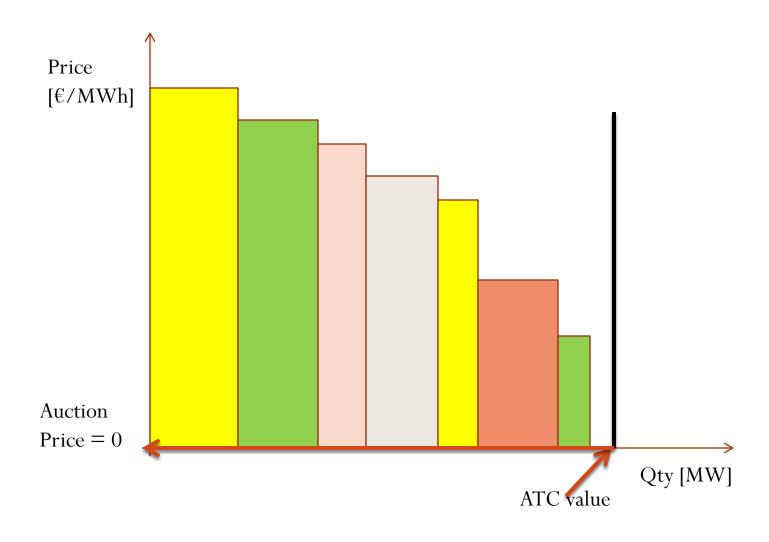
ATC Auction: Standard Bid

Bids per cross-border interface and direction, same for each hour of the auction period, up to 10 pairs {Qty/Price}



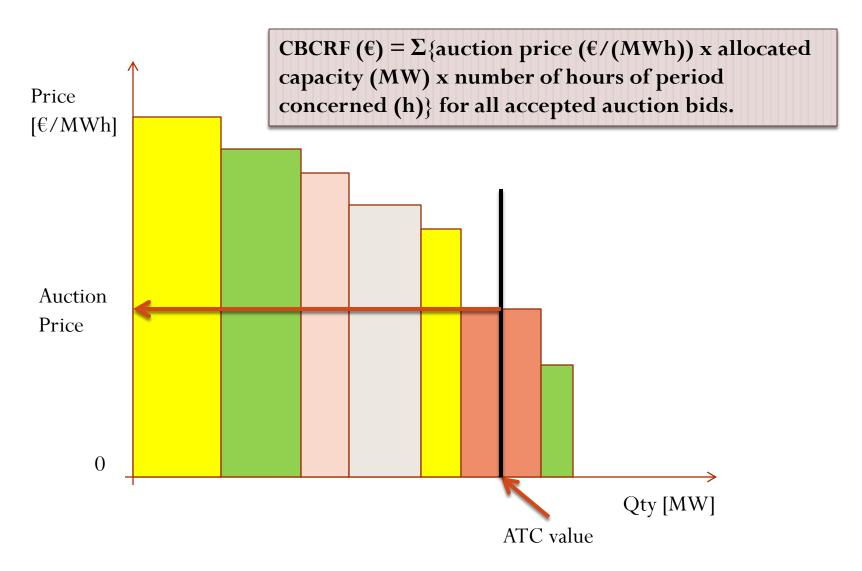


ATC Auction: Standard Merit Order (1)





ATC Auction: Standard Merit Order (2)





ATC Allocation results: February 2012

| Direction: Export | | | | | | |
|-----------------------|---------|----------|---------|--|--|--|
| Period: February 2012 | | | | | | |
| Albania - Montenegro | | | | | | |
| ATC | Campani | Capacity | Price | | | |
| [MW] | Company | [MW] | [€/MWh] | | | |
| | EFT | 30 | | | | |
| | GEN-I | 30 | | | | |
| 175 | GSA | 20 | O | | | |
| | CTAL | 10 | | | | |
| | Σ | 90 | | | | |
| Albania - Kosovo | | | | | | |
| ATC | | Capacity | Price | | | |
| [MW] | Company | [MW] | [€/MWh] | | | |
| | EFT | 30 | | | | |
| | GEN-I | 20 | | | | |
| 105 | GSA | 20 | O | | | |
| | CTAL | 10 | | | | |
| | Σ | 80 | | | | |
| Albania - Greece | | | | | | |
| ATC | Company | Capacity | Price | | | |
| [MW] | Company | [MW] | [€/MWh] | | | |
| 125 | GEN-I | 79 | | | | |
| | EFT | 36 | 0.75 | | | |
| | CTAL | 10 | | | | |
| | 2 | 125 | | | | |

| Direction: Import | | | | | | | |
|-------------------|-----------------------|----------|---------|--|--|--|--|
| F | Period: February 2012 | | | | | | |
| | | | | | | | |
| | Albania - Montenegro | | | | | | |
| ATC | Company | Capacity | Price | | | | |
| [MW] | , | [MW] | [€/MWh] | | | | |
| 175 | EFT | 105 | C 48 | | | | |
| | GEN-I | 40 | | | | | |
| 1/5 | GSA | 30 | 6.48 | | | | |
| | Σ | 175 | | | | | |
| Albania - Kosovo | | | | | | | |
| ATC | | Capacity | Price | | | | |
| [MW] | Company | [MW] | [€/MWh] | | | | |
| | EFT | 50 | | | | | |
| 105 | GEN-I | 30 | 6.87 | | | | |
| 105 | GSA | 25 | | | | | |
| | Σ | 105 | | | | | |
| Albania - Greece | | | | | | | |
| ATC | Camana: | Capacity | Price | | | | |
| [MW] | Company | [MW] | [€/MWh] | | | | |
| 125 | GSA | 40 | | | | | |
| | EFT | 80 | 0.33 | | | | |
| | GEN-I | 5 | | | | | |
| | Σ | 125 | | | | | |