



# SEE VRES WORKSHOP

NOVEMBER 2018, VIENNA

# POWER SECTOR ORGANIZATION IN B&H

## **NOSBiH responsibilities:**

- Managing the work of all high voltage facilities at voltage level 110kV and above
- Managing the balancing energy market
- Developing of Indicative Generation Development Plan
- Cooperation with ENTSO-E

## **Elektroprenos BiH responsibilities:**

- Transmission of electric energy
- Maintenance, construction and development of transmission network in B&H
- Developing of Long-term Transmission System Development Plan for 10 year period

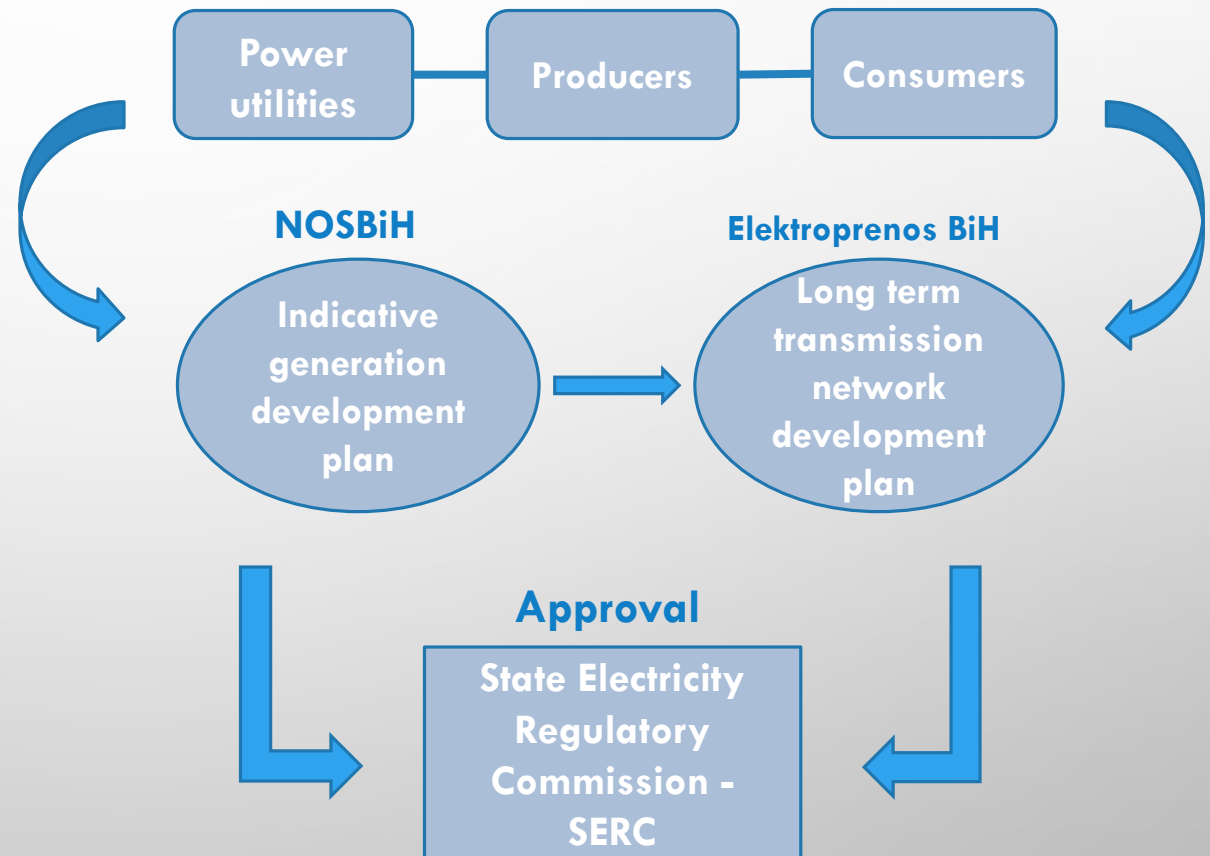
# GENERAL ENERGY PLANNING FRAMEWORK

In accordance with National Grid Code (complied with Article 22, Directive 2009/72/EC), Elektroprenos BiH develops Long Term Transmission Network Development Plan, based on inputs from Indicative Generation Development Plan and relevant transmission system users. Plan in particular:

- indicates to market participants the main transmission infrastructure that needs to be built or upgraded over the next ten years
- contains all the investments already decided and identify new investments which have to be executed in the next three years
- provides a time frame for all investment projects

<http://www.nosbih.ba/bh/korporativneAktivnosti/indikativni-plan-razvoja-proizvodnje/86>

<http://www.nosbih.ba/bh/korporativneAktivnosti/plan-razvoja-prenosne-mreze/87>



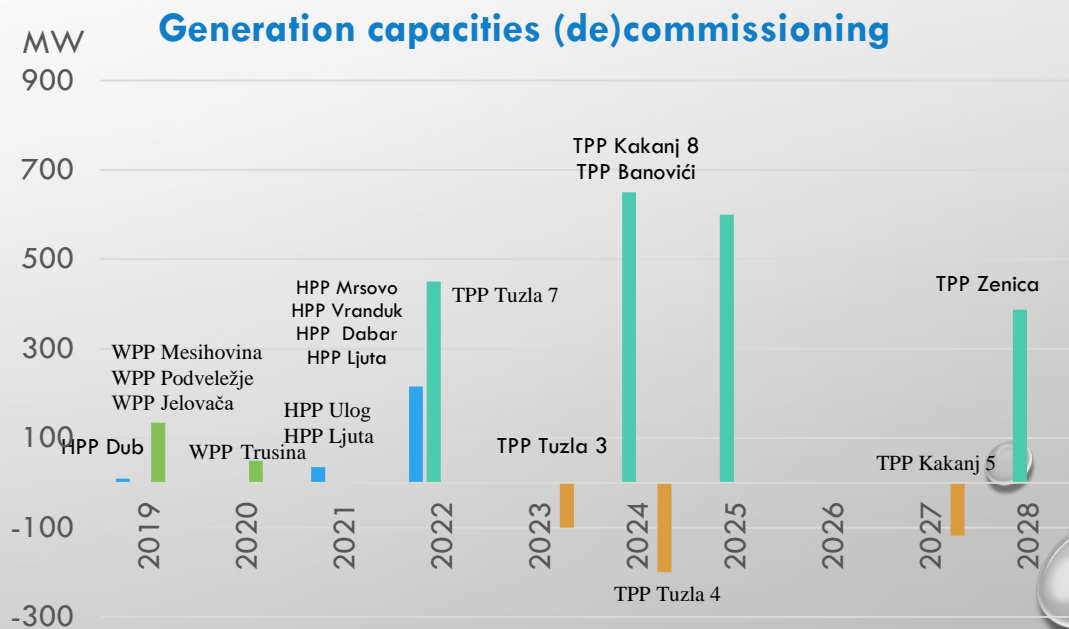
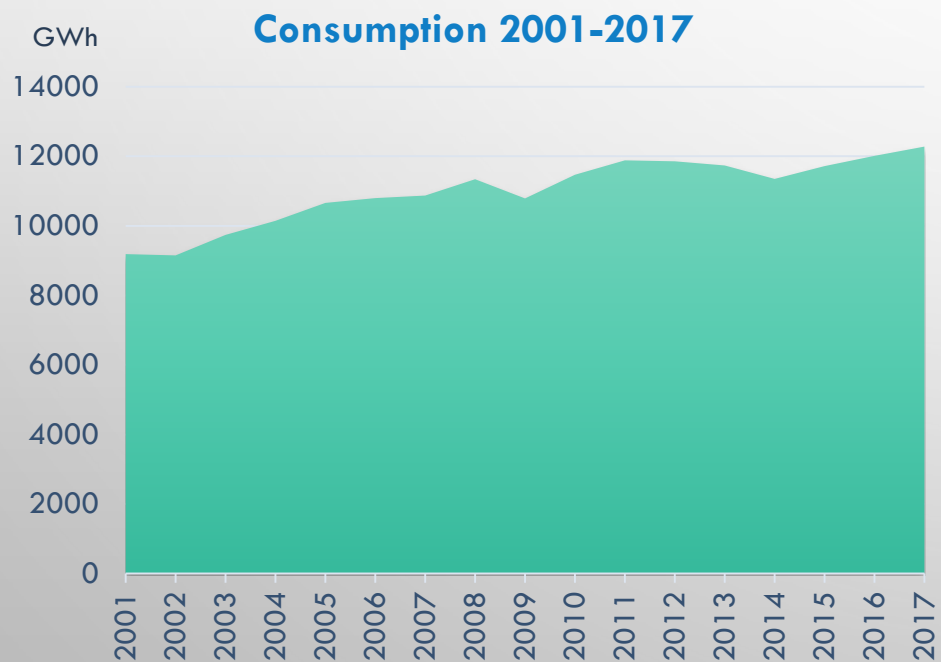
# POWER SECTOR PLANNING

## Power demand forecast:

- users inputs
- realization for a period of ten years
- TSO estimation
- three load scenarios

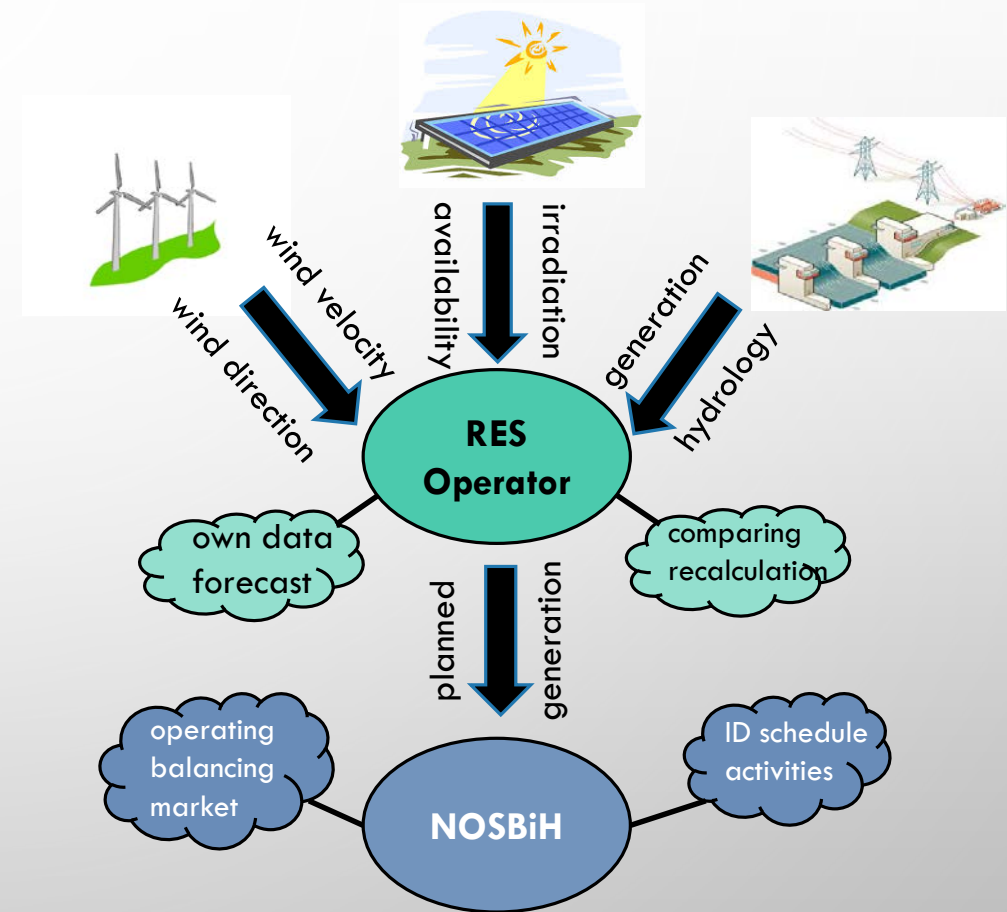
## Generation capacity scenario

- single/base scenario
- permissions needed



# PLANNING TOOLS/GENERATION SCHEDULING

- RES Operator is BRP – Balancing Responsible Party for all renewable energy sources
- RES producers send planning data to RES Operator
- RES Operator provides information in D-1 on generation schedule for day D
- NOSBiH operates balancing market
- NOSBiH is in charge for ID schedule changes



# FUTURE INTEGRATION, CONCERNS & ANALYSIS

## Level of RES penetration?

### Current

- HPP 2095MW
- WPP 50,6MW + 36MW (end of 2018)

### Future

- HPP 268MW
- WPP 100MW\*\*

## Considerations & concerns?

- Lack of regulation reserve
- Balancing costs
- Insufficient transmission capacity



**THANK YOU FOR YOUR ATTENTION!!!**

