



**Future Flow
from lessons learned
to Grid users opportunities
- access to aFRR -**

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement n° 691777

Actual situation and evolution during FF project

➤ Providers – generators only (HPP & TPP)

Consume involvement

Ord ANRE 67/2019

- Type of controllability:

DSR – P control

- Type of participation - individual or aggregated

Ord ANRE 176/2019

Process of notification & conformity

Ord ANRE 228/2018

Prosumers connection

Opportunities for aggregations

- 2017 – same technology and same license (WPPs, PVPP, termal motors)

- Sept 2019 – Ord ANRE 178 – all renewable, not important license

Merit Order List Activation

AGC – MOL activation till 2021

– asymmetrical bids

Units – change from proportional mode to direct power activation

– mandatory requirement for all new generations (1 Unit HPP and CCPP – 4GT&2ST;

– Modernized: 5 HPP & 2 TPP.

➤ Activation: pro-rata, symmetrical reserve

➤ Minimum reserve 10 MW



5 MW aFRR reserve



1 MW aFRR reserve

➤ Marginal price algorithm



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National legislation for a large access to reserve market

Regulation adopted:

Consumers:

Technical Norms - Ord ANRE 67/2019

Process of notification & conformity tests - Ord ANRE 176/2019

Prosumers connection - Ord ANRE 228/2018

Settlement for aggregation - Ord ANRE 178/2019

Approval in progress:

Terms and condition for reserve providers

- **Generation, consumers, aggregation and group of generation or generation & consumers**

Prequalification procedure for reserve providers - conditions

Under construction:

• **Redispatch procedure**

• **Rules for testing and monitor of reserve providers**



FF Lessons learned & action forward

- ❖ Excellent support for Picasso platform implementation – (first simulations, first overview about consequences and TEL opportunities)
- ❖ Knowledge on Romanian users interest (GENI investigations)
-higher from PV&WPP lower from consumers part-
- ❖ First redispatch simulations algorithm regarding Transelectrica
- ❖ First cross border aFRR activations

- ❑ Increase the information dissemination with lesson learned from FF project;
- ❑ Encourage consumers to participate to reserve market, especially by aggregation;
- ❑ Open aFRR market for a diversity of users: consumers, different type of aggregations and groups of reserves by decreasing the minimum limit and issue technical settlement and operation rules;
- ❑ Change the concept of aFRR activation;
- ❑ To develop the reserve market for DG &DR starting with mFRR or RR - pilot projects.



Thank you



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