

Regulatory Aspects in the Context of a Global Grid

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Objective & Approach



Planning

acceptance
prioritization
financing
licensing

Integration

regional mindset
stability
reinforcement
trading

Operation

harmonization
cooperation
transparency



Planning Phase

Involved stakeholders: national governments/ministries/agencies, financial inst., utilities, SOs, NRAs, contractors, public society, etc.

- Reach stakeholder **agreement**
- Harmonize **support schemes** across regions
- Promotion and subsequent prioritization as **PCIs**
- Secure **financing** (as *merchant investment*)
- Secure **construction licensing** (intl./domestic, land/maritime, etc.)

Integration Phase



Involved stakeholders: utilities, SOs, NRAs, (potential) market agents, etc.

- Establish **regional regulatory/operational institutions**
 - long-term & non-discriminatory regulatory periods (mitigate uncertainty)
 - integration defending regional interests, yet compatible with national arrangements
- Encourage cross-border **commercial transactions**
- Regional **network reinforcement**
- Development of common **trading platforms**
 - (i) bilateral trading (e.g., PPAs), (ii) establishing wholesale and (iii) other markets (e.g., intra-day, balancing, ancillary services)



Operation Phase

Involved stakeholders: SOs, NRAs, market agents, etc.

- Harmonize **operation guidelines, network codes & regulation**
 - cost allocation (*cap-and-floor* hybrid, sharing within regions)
 - network access
 - congestion management & capacity allocation
 - imbalance settlement
 - grid planning, data exchange, emergency procedures, etc.
 - market features: opening & closing times, bid format, bid-matching algorithm...

- Foster **inter-actor coordination** to improve security & reliability



Concluding Remarks

- ❑ **Balance to be sought** between opposing interests (regional vs. national)
- ❑ Regulatory **uncertainty mitigation** on all dimensions
- ❑ The “**single system paradigm**” as benchmark for regional integration

- ❑ *Open question(s):*
 - on a global grid scale, how to deal with the transit jurisdiction problem?