



AFRICAN
SCHOOL OF
REGULATION



IIT
INSTITUTO DE
INVESTIGACIÓN
TECNOLÓGICA



POLICY DIALOGUE ON
RENEWABLE GENERATION AND REGIONAL POWER TRADE IN AFRICA

February 20, 21 and 22, Madrid, Spain

WRAP UP & ACTION PLAN

RENEWABLE GENERATION AND REGIONAL POWER TRADE IN AFRICA

DAY 3 – FEBRUARY 22

9:30 to 11:00. Session 5. Wrap up. Highlights, findings and actionable decisions.

- Messages for policymakers.
- Interaction and networking with participants at the SPIREC Conference.

11:00 to 11:30. Coffee break.

Participants of the Policy Dialogue are invited to attend the final sessions, Closing Ceremony, lunch and community events of the SPIREC Conference. See the SPIREC Program for details.

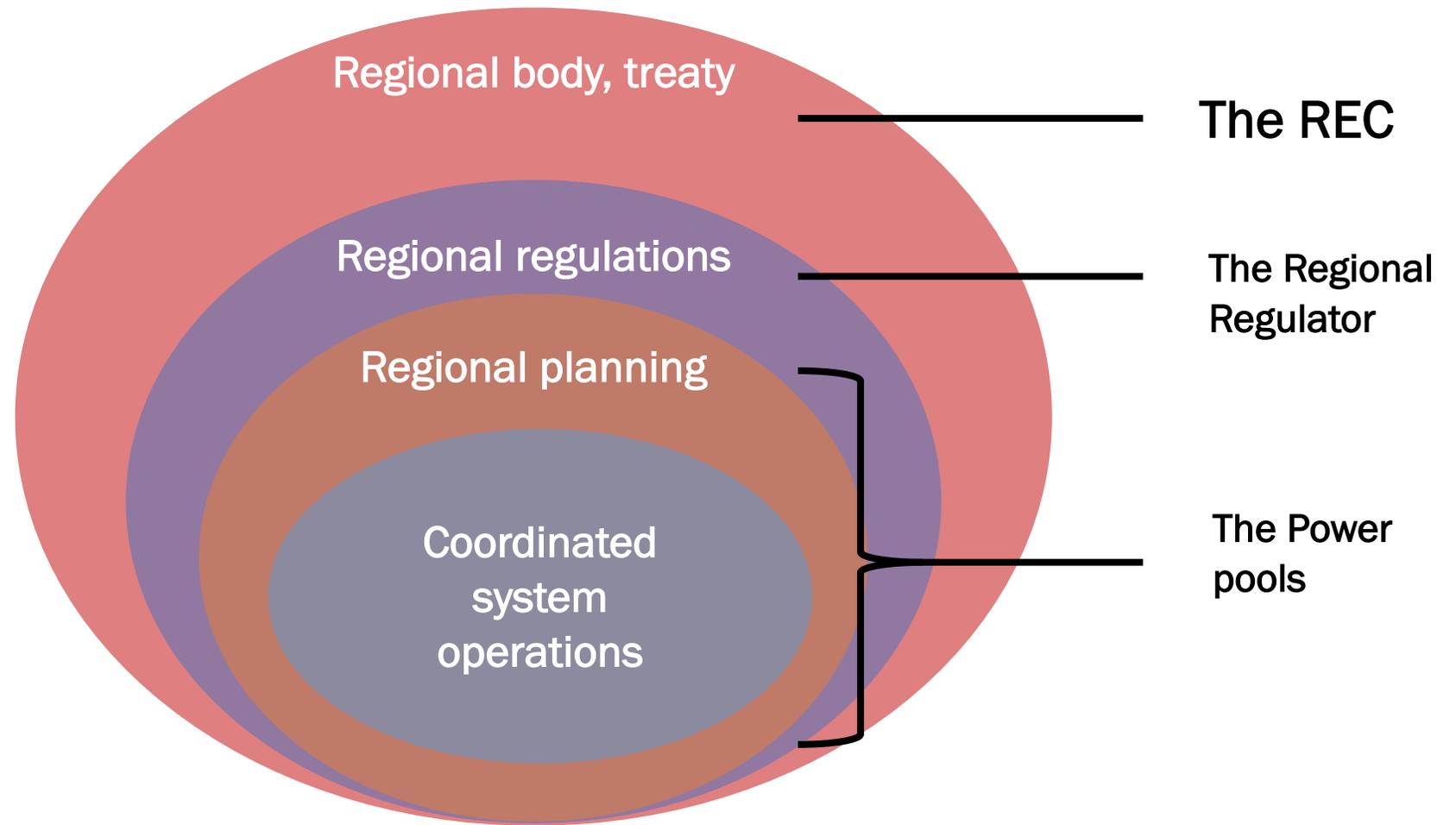
The program for today

- **Wrap up.**
 - Quick review of the highlights / key topics / takeaways
- **What's next?**
 - How can the ASR be useful to the “cause of power trade” and renewables?
 - Any further regulatory activities that the “power trade community” can adopt?
 - Explore possibilities of reaching out to the political / decision making level

The wrap up

Institutions for regional power trade

What is a “power pool”?



Key topics debated during the Policy Dialogue

- SESSION 1

- Update about the power pools, regional infrastructures & the potential and actual deployment of renewable power production in Africa

- SESSION 2

- Assuming that a high level of integration is desirable, how progress can be made at institutional level?

- SESSION 3

- How to remove barriers to transmission investment?
- The path towards adopting best practices in transmission cost allocation

- SESSION 4

- Coping with bilateral transactions in the search for operational efficiency & security of supply

What's next?

How can the ASR be useful to the "cause of power trade" (and renewables)?

- Schedule a **virtual 3-day x 3 hour/day conference on regional power trade** in about one month, based on moderated panel debates among experts on the key topics, with free attendance open to the public
- **Policy dialogues or conferences** (*virtual or presential*) on key contentious topics
 - International experiences with bilateral contracts in regional contexts
 - Allocation of transmission costs & design of transmission charges
 - International experiences with governance & responsibilities of regional institutions
 - Regional infrastructure planning and its enforcement
- **Training courses** on the same topics (*once it is clear what to teach*)
- **Applied research** on the same topics

Any further regulatory activities that the “power trade community” can adopt?

- To **enhance the capabilities** of regional system operators & regional regulators?
- To facilitate the deployment of **regional infrastructures** of generation & transmission?
- To **improve the rules** governing trade, advancing towards the “single system paradigm” ideal vision?



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CLOSING THE SESSION

Extra slides

The components of “cross-border”^{*} power trade (a question of terminology: what is a “power pool”?)

- “Cross-border” **system operation**
 - Network congestions, security, frequency control, power restoration
- **Coordination rules** to share and plan common infrastructure
 - Schedule bilateral trade, scheduling economic trade, allocation of transmission costs, joint planning of infrastructure capacity expansion
- Ultimate responsibility for **joint decision making**
 - Agreement protocol (multi-utility, multinational), supra national government

(* Cross-border can refer to inter-utilities in the same country (Spain, 1985), same but involving several states in the same country (New England Power Pool since 1970s, Australia), or several countries (EU IEM, SAPP, WAPP).

SESSION 1 - Points for information and debate

- A. Information: What are the new/recent developments in the different power pools? Examples: new members; significant governance changes; new regulations approved; new organised markets opened; important changes in traded volumes; news in the executive responsibilities of the regional system operator or the regional regulator, etc.
- B. What should be the desired objectives in the design and implementation of African power pools? Least-cost dispatch of generation resources from a regional perspective? Installation of power plants of regional dimension? Attract private investors to build cross-border transmission projects? What level of wholesale market competition is needed to achieve these goals? How important is the level of competition in the market?
- C. Do you apply or envision to apply any restrictions in your grid code to the volume of renewable generation in your power pool? Are you getting ready to perform studies to model the operation of your power system with large penetration of the different renewable generation technologies?
- D. Is there any indicative generation expansion planning at regional level? Are regional regulators and system operators involved in energy policy decisions regarding the future generation technology mix?

SESSION 2 – Topics for discussion

- Information: Current significant issues concerning the regional institutions and any expected developments.
- Assuming that a high level of integration (least cost regional dispatch, adequate cross-border transmission infrastructure, regional power plants, reliance on power imports and exports) is a desirable target, which is the major impediment for progress and what is the most effective action that could be implemented to achieve this objective in your power pool?
- How much progress has been made, or is envisioned that will be made, in the pan-African efforts on continental approaches to transmission planning or in the Renewable Energy Corridors?
- Additional executive responsibilities that the regional regulator and the regional system operator should have, and they presently do not have. For instance, how to empower regional institutions in regions where the decision-making executive power is almost fully in the hands of national states?
- Perspectives: Are the political conflicts existing in certain regions impeding the signing of high-level framework agreements for regional markets? Can the creation of regional markets contribute to downscaling political frictions?

SESSION 3 - Topics for discussion

- **How to remove the barriers to transmission investment?**
 - In enforcing the plans. In financing the planned infrastructures. No coincidence of regional plans with national priorities. No agreement on cost allocation. Too much risk in cost recovery.
- **Why resistance to adopt sound transmission cost allocation principles?**
 - Avoid “pancaking”. Avoid charging to commercial transactions. Allocate to beneficiaries or (proxy) based on actual physical flows.
 - Allocate cost of regional transmission projects to countries, which will decide how to charge internally.
 - Design the format of the charges to the end network users to avoid creating economic distortions.