



Exchanging Best Practices to Incorporate Variable Renewable Energy into Long-term planning in Arab countries

Grand Millennium Hotel
Amman, Jordan



April 24, 2019

1

Generation adequacy and capacity credit

- Difference between adequacy and security
- Measurement of Capacity Credit and Various Factors
- Importance of consideration and method of integration

2

How generation adequacy and capacity credit can be reflected in energy planning models

- Overview to mimic capacity credit and implications in modeling
- Checkpoints used for optimal capacity expansion models
- Different country practices

3

System Flexibility

- Definition of Flexibility
- Types of flexibility and its importance
- Definition of time slices and the use of the IRENAFlextool

4

Exchange of country experiences and discussions

- Is concept of flexibility relevant to country?
- How is power system flexibility reflected in long-term planning?
- Gaps faced in current models

Program Day 3

09:30
10:25

- IRENAFlextool/transmission investment and resource quality

10:25
11:15

- Exchange of country experiences

11:15
11:45

- Coffee Break

11:45
12:45

- Stability related operational constraints

12:45
13:30

- Exchange of country experiences

13:30
14:30

- Lunch

14:30
16:30

- Identification of planning gaps

17:00
18:15

- Identification of follow-up/Closing

1. Out of the five aspects of the long-term planning that we discussed today, which aspects need to be improved in your long-term planning process?
2. What are the barriers? Access to information, access to data, access to tools, access to training opportunities?
3. How can the region work together to overcome the gap? How can IRENA/RCREEE/other technical partners support the process?
4. If we are to organize follow up activities, how should that look like?

1. Priority topics

- Out of the five aspects of the long-term planning that we discussed today, which aspects need to be improved in your long-term planning process?

	Generation	Networks
Adequacy	Firm capacity	Transmission capacity
Security	Flexibility	Voltage control capability
	Stability (frequency response and voltage response)	

Most relevant 
High relevance 

System-specific 
Near-term relevance 

2. What are the barriers?

- Access to information
- Access to data
- Access to tools
- Access to training opportunities
- Any other points?

3. How can the region work together to overcome the gap? How can IRENA/RCREEE/other technical partners support the process?
4. If we are to organize follow up activities, how should that look like?
 - Hands on training on tools (on which topics?)
 - Expert lectures from wide range of country practitioners
 - Knowledge product (on which topics?) – reports, technical guideline, templates
 - ??