EXPERIENCE WITH EUROPEAN GRID DEVELOPMENT PROJECTS OF COMMON INTEREST

Nico Keyaerts
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Bolwerklaan 21, B-1210, Brussels, Belgium
Leonardo Meeus, Director of Vlerick Energy Center

Via Boccaccio 121, I-50133, Florence, Italy
Jean-Michel Glachant, Director of Florence School of Regulation
http://fsr.eui.eu
PROJECTS OF COMMON INTEREST (PCIs)

- Introduction

- EU regulatory frame for PCIs
  - Cost Benefit Analysis
  - Cross-Border Cost Allocation
  - TSO incentives
INTRODUCTION
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Cross-border Electricity Exchange in EU

Year

Exchange/Consumption

1998 1999 2000 2001 2002 2003 2004 2005

7,5% 8,2% 8,9% 8,8% 9,4% 9,6% 9,1% 10,3%
INTRODUCTION

Interconnection capacity (NTC) in relation to installed generation capacity (2007)

- Under 10%
- 10-30%
- Over 30%
INTRODUCTION

Figure 26: Detected bottlenecks during N-1 conditions of UCTE Scenario North
INTRODUCTION

- Evaluation of infrastructure policy
  - €200 billion needs to be invested in electricity and gas infrastructure in order to achieve the EU 2020 energy and climate objectives
  - Risk that almost half of this investment will be too late or not at all (why?)

- Energy Infrastructure Package (2013)
  - EU Regulation on guidelines for trans-European energy infrastructure
  - EU Regulation establishing the Connecting Europe Facility
INTRODUCTION

- 2007: Priority interconnection plan
- 2008: Green Paper on energy networks
- 2011: Proposal by European Commission
- 2012: Agreement Council and Parliament

Video: toolkit

https://www.youtube.com/watch?v=MOg_aE_c1Tg&index=17&list=PL6D1C0A2662240290
INTRODUCTION
INTRODUCTION

- Permit granting
  - One stop shop
  - Procedure with deadlines

- Cross-Border Cost Allocation (CBCA)
  - Procedure with deadlines
  - ACER decision power

- TSO incentives
  - Publication best practices MS/ACER
  - EC Guidelines?

- Connecting Europe Facility
  - Energy EUR €647M in 2014
  - EIB project bonds, and risk capital, and grants as last resort
INTRODUCTION

Source: DG Energy

Current situation (2011)

Situation after investing in 1st PCI list (2020)
INTRODUCTION

http://ec.europa.eu/energy/infrastructure/transparency_platform/map-viewer/m/main.html

ENERGY
Projects of common interest – Interactive map
INTRODUCTION
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COST BENEFIT ANALYSIS

- Selection process (every 2 years)
  - Promoters propose
  - Regional Groups (MS + EC) rank
  - European Commission adopts a list
COST BENEFIT ANALYSIS

1. Scope of the analysis
   - Project definition
   - Baseline definition
   - Effect mapping
   - Distributional effects

2. Calculation of net benefit
   - Monetization
   - Inter-temporal discounting of costs and benefits
   - Uncertainty

3. Ranking projects
STANDSTILL OF COST BENEFIT ANALYSIS

- Coordination
  - How to deal with interactions between PCIs

- Transparency
  - How to gain trust and public acceptance

- Monetization
  - Where do the experts stop and the politics start
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CROSS-BORDER COST ALLOCATION

What do you think?

- A: Each country pays for assets on its own territory
- B: Beneficiaries pay principle
- C: Burden sharing agreement among countries (EU-tariff component)
CROSS-BORDER COST ALLOCATION

(C) 2nd Energy Infrastructure Package?

(A) Status quo

(B) Difficult to implement in practice

Between (A) and (B) case-by-case
(innovative CBCA agreements between countries)
CROSS-BORDER COST ALLOCATION
SHOWCASING CBCA INNOVATION

Figure 1. The Norway-Sweden Case

Source: own depiction
Project promoters and NRAs to take the lead in designing innovative CBCA agreements

- Basing the CBCA agreements on the CBA results;
- Entering into a formal contract;
- Agreeing on a set of projects rather than individual projects.

ACER to limit its intervention to guaranteeing a minimum standard

- Remedy the strongest disincentive: if there is a strong likelihood of a significant net loser, the loss should be compensated
- Safeguard the risk of stranded costs: introduce contract to formalize commitment, contingent to the commissioning date
- Minimum standard project grouping: should be part of CBA method so that strongly complementary projects are defined as a single PCI
CBCA innovation is ongoing

No loser, no compensation
Loser, compensation
No loser, compensation
CROSS-BORDER COST ALLOCATION
REALITY CHECK: CLOSING THE GAP

- **Innovation is ongoing**
  - Continue basing the cost allocation decisions on the CBAs
  - Continue coordinating these decisions for strongly interacting projects

- **Gap remains between practice and recommendations**
  - Revisit the significance threshold and the interaction with the Connecting Europe Facility
  - Promote the good practice of using market tests
  - Require a complete cross-border cost allocation decision
  - Start including binding commitments in the decisions, especially with respect to the commissioning date
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REASONS FOR DELAYS

- permit granting (15%)
- national law changes (20%)
- environmental problems (25%)
- land acquisition (4%)
- correlation with other delayed project (3%)
- delay in tendering (4%)
- delay of cross-border agreements or agreements with third party promoters (3%)
- localisation of substations (4%)
- other (4%)
- no info (4%)

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Where do you want to be?

TSO INCENTIVES CAUSING DELAYS?

TSO Risk

Risk of under investments

Risk of gold plating

TSO Rate of Return
Case-by-case regulation

Argument for case-by-case: avoid over-paying for low-risk projects, and avoid underpaying for high-value high-risk projects

Default regulatory framework

Arguments against case-by-case
- Benefit can be limited for some countries: depends on how heterogeneous projects are in terms of risk
- Costs can be high for some countries: requires new skills and resources for regulatory authorities and companies

If the default return is high enough, there is only a problem of overpaying for low-risk projects, which is a national problem rather than an EU problem
TSO INCENTIVES

**NRAs**
- Ensure appropriate TSO return for TSO risk

**ACER**
- Benchmarking national regulatory frameworks that apply to PCIs and spreading good practices
- Could use scale advantage to assist NRAs that want to do case-by-case
CONCLUSION

Ongoing work
3 reasons why standing still is going backwards for CBA of PCIS

Ongoing work
Gaining public acceptance of grid infrastructure projects

Ongoing work
Development of an EU energy infrastructure policy

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THANK YOU!

Experience with European Grid Development Projects of Common Interest

Nico Keyaerts
nico.keyaerts@vlerick.com