

City Briefing

Offshore Transmission

April 2009

10.45am

Registration

11.00am

Main Presentation

- | | | |
|----|-----------------------------------|--|
| 1. | <i>Welcome</i> | <i>Rob Winchester, Partner, Ernst & Young</i> |
| 2. | <i>Introduction</i> | <i>Alistair Buchanan, CBE, Chief Executive, Ofgem</i> |
| 3. | <i>Regime Overview</i> | <i>Robert Hull, Director, Regulatory Services, Ofgem</i> |
| 4. | <i>Tender Process</i> | <i>Stephanie McGregor, Associate Director, Ofgem</i> |
| 5. | <i>Investment Characteristics</i> | <i>Lorna Shearin, Managing Director, RBC Capital Markets</i> |

12.30pm

Panel Q&A

Closing Comments

Buffet Lunch

Section 1

Welcome

Rob Winchester, Partner, Ernst & Young

Section 2

Introduction

Alistair Buchanan, CBE – Chief Executive, Ofgem

Ofgem – Working for today's consumers & looking ahead for tomorrow's consumer

- **Project Discovery**
- **“RPI-X@20 Project”**: first review in 20 years on the way we charge for pipes and wires
- **Retail Markets Probe** – the Remedies: to improve consumers' experiences
- **Building a new offshore wind regime**
- **Delivering new Networks access regime**
- **Governance Review**: unblocking the system of red tape
- **“Lens Project”**: Ofgem's long term energy networks scenario project

**Forward looking
projects to protect
and promote GB
consumers' interests**

Section 3

Regime Overview

Robert Hull, Director, Regulatory Services

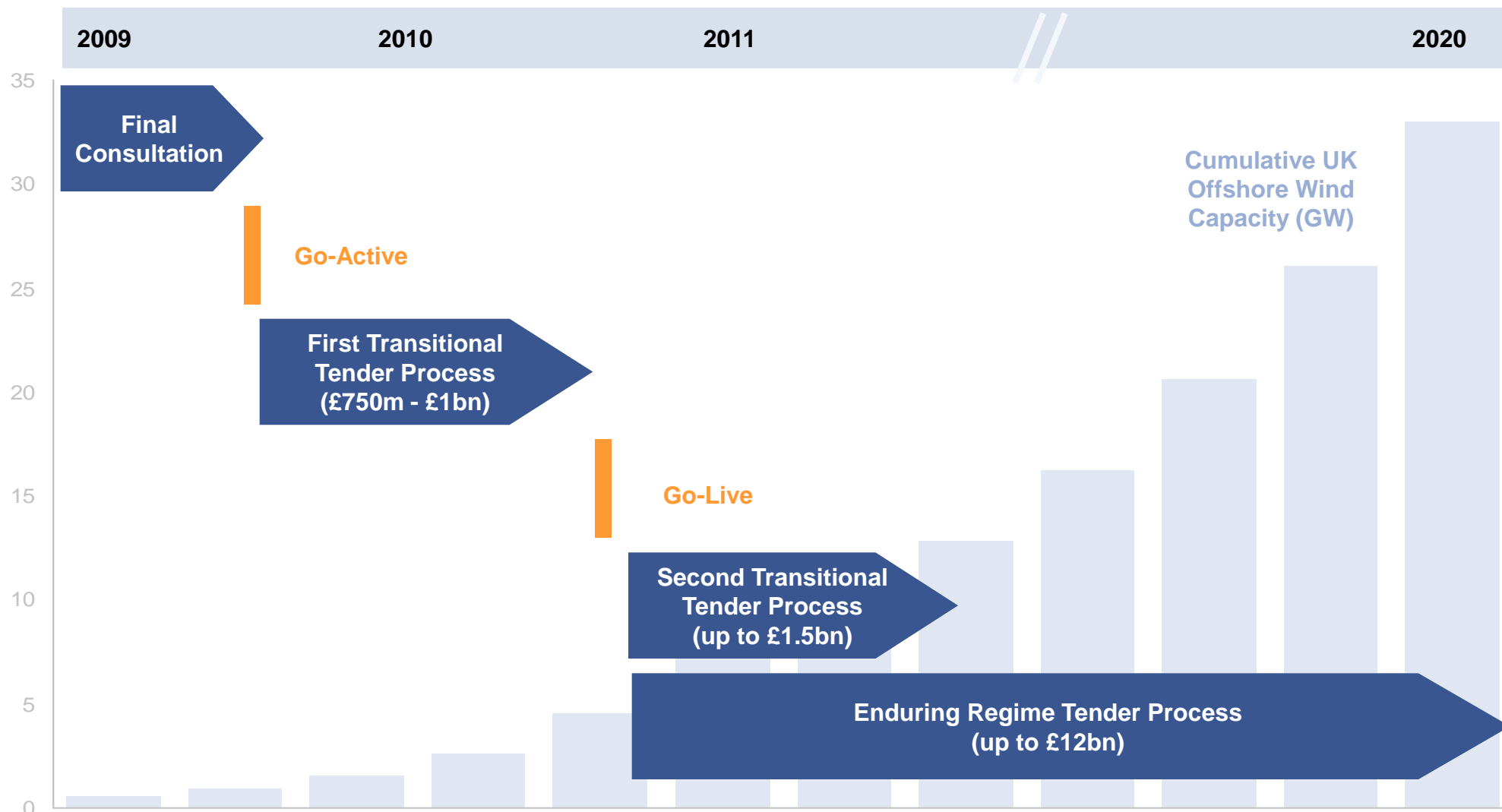
Background and Policy Context

- Offshore Wind:
 - Major contributor to UK's 2020 renewables target
 - UK already no. 1 in offshore wind – 598 MW installed
 - Plans for up to 33 GW of offshore wind under Rounds 1, 2 and 3

- Strategic Environmental Assessment (SEA) and Round 3 Timetable:
 - Environmental Report consultation - April 09
 - Government Decision on SEA - Spring 09
 - Crown Estate finalises zone awards - end 2009
 - Construction on first projects - 2014 onwards

- New Offshore Transmission Regime:
 - Key enabler for offshore wind and delivery of 2020 targets
 - Developers need a grid connection they can afford – on time
 - Up to £15 bn of new offshore grid needed
 - Regulated regime

Overview of Offshore Regulatory Regime Timeline



What is a transitional project?

- New regime needs to be applied to:
 - Projects under construction
 - New projects
- Three classifications for transitional projects:

**Projects constructed
by 'Go Active'**

**Projects not
constructed, but
achieve financial close
by 'Go Active'**

**Projects that achieve
financial close after
'Go Active' but before
'Go Live'**

- Go Active – Expected 24 June 2009
- Go Live – Expected June 2010
- Offshore transmission will become a prohibited activity without a licence

Offshore Transmission - The new regime

- Generator seeking connection triggers a competitive tender process
 - Winning bidder is granted licence that guarantees a 20 year revenue stream
 - Limited regulatory intervention
 - Long term low risk regime
- OFTO appointed by competitive tender process
 - Tenders run by Ofgem
 - Delivering low cost, timely and fit for purpose connections, with flexibility for the future
- Opportunity for new entrants
- Final consultation underway on regime

Stages to Overall Offshore Transmission Regulatory Regime

■ Transitional Projects (first tender summer 2009)

- Already being built by the generator / developer
- Ofgem will conduct a cost assessment exercise to establish the transfer value of these assets (assessed pre- and post-construction)
- Potential OFTOs will bid to own, finance and maintain the transmission assets
- Assets will be transferred to the OFTO once commissioned

■ Enduring Projects

- OFTO will design, finance, construct, own and manage offshore transmission assets
- Will apply to some Round 2 projects, projects recently announced in Scottish Territorial Waters, and projects leased under Round 3

Low Risk Regulatory Regime for Transitional Projects....

- 20 year revenue stream from GBSO
- No automatic periodic regulatory review
- No construction, energy or stranding risk
- Low counterparty risk
- Well defined and proven regulatory regime – extending onshore precedent
- Well defined tender process

.....Due to Incentives, Adjustments and Upsides

- Availability incentives and penalties both capped at 10% of revenue
- Post construction revenue adjustments to reflect final transfer value
- Revenue fully indexed to RPI
- Cost pass through and pre-defined adjustments for business rates, Ofgem costs, leases, code changes
- Pass through of extra decommissioning costs if change of law
- Incremental capex up to cumulative 20%
- Possible extension or re-tender at the end of the revenue stream
- Opportunities for upside

Key Parties



**Regulator of the gas and
electricity markets in Great
Britain**



**Responsibility for the UK's
renewable energy strategy**

OFTO

**Holder of a regulated
licence for the offshore
transmission assets**

Generators

**Owners and developers of
offshore wind farm
projects. User of the assets
owned by the OFTOs**

Role of Great Britain System Operator ('GBSO') vs. Transmission Owners

- 3 existing licensed transmission owners
- Regulated through 5-year price control periods
- Nearly £4 billion of new onshore investment allowed in current regulatory period

GBSO

System Planning

System Operation

Market Facilitation

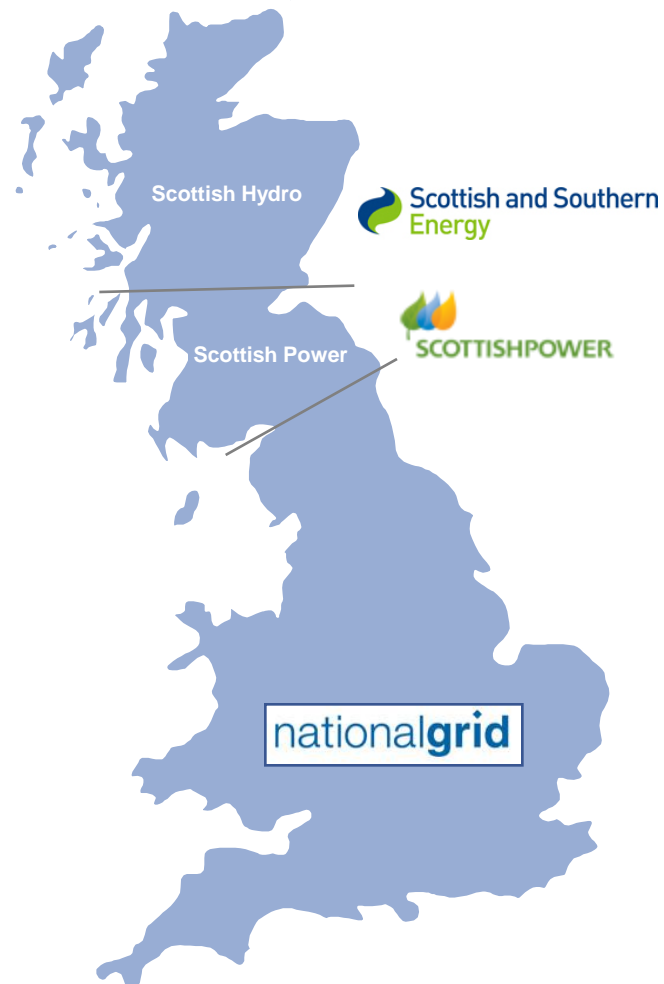
Transmission Owner

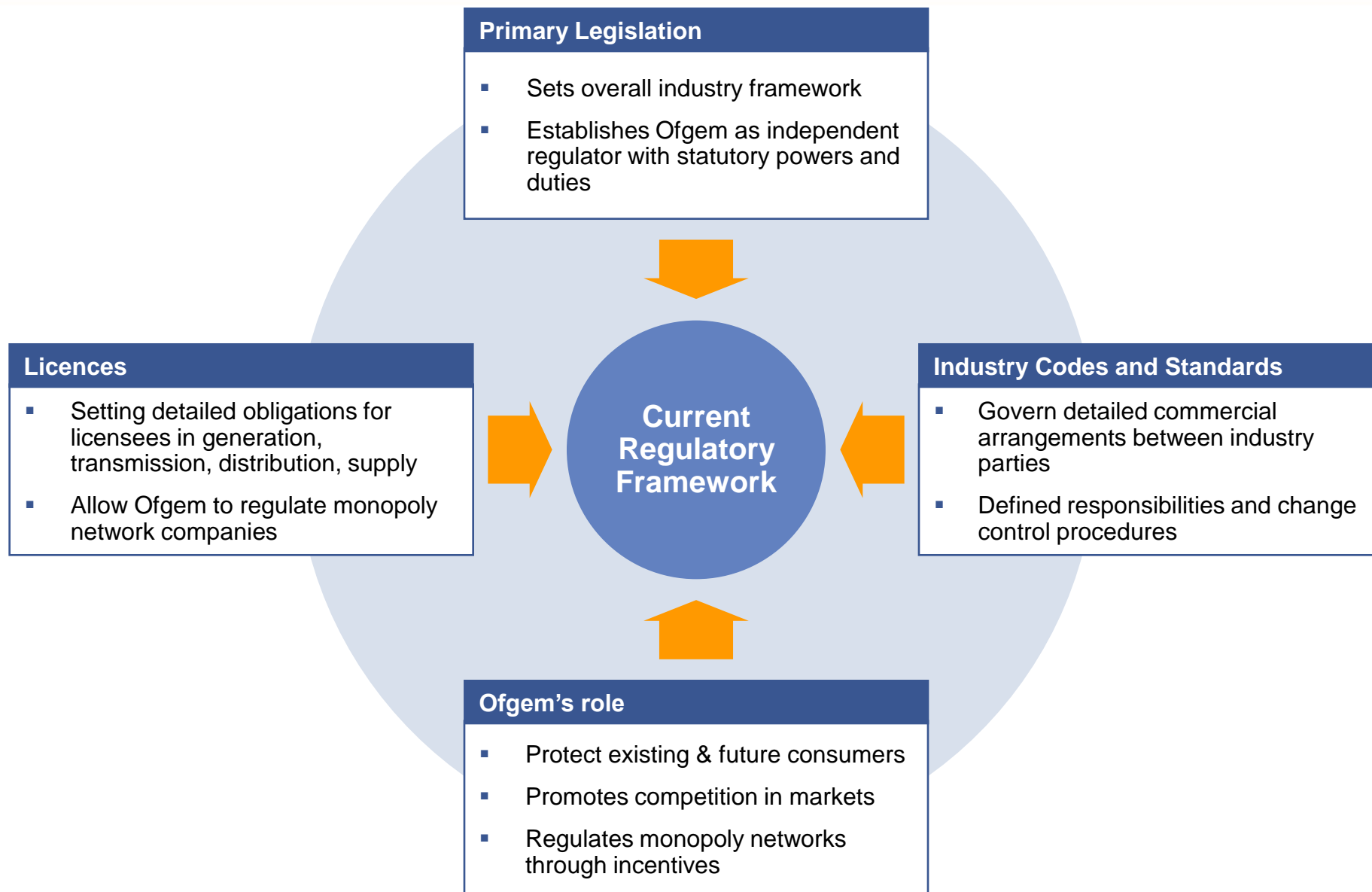
System Design

Project Management

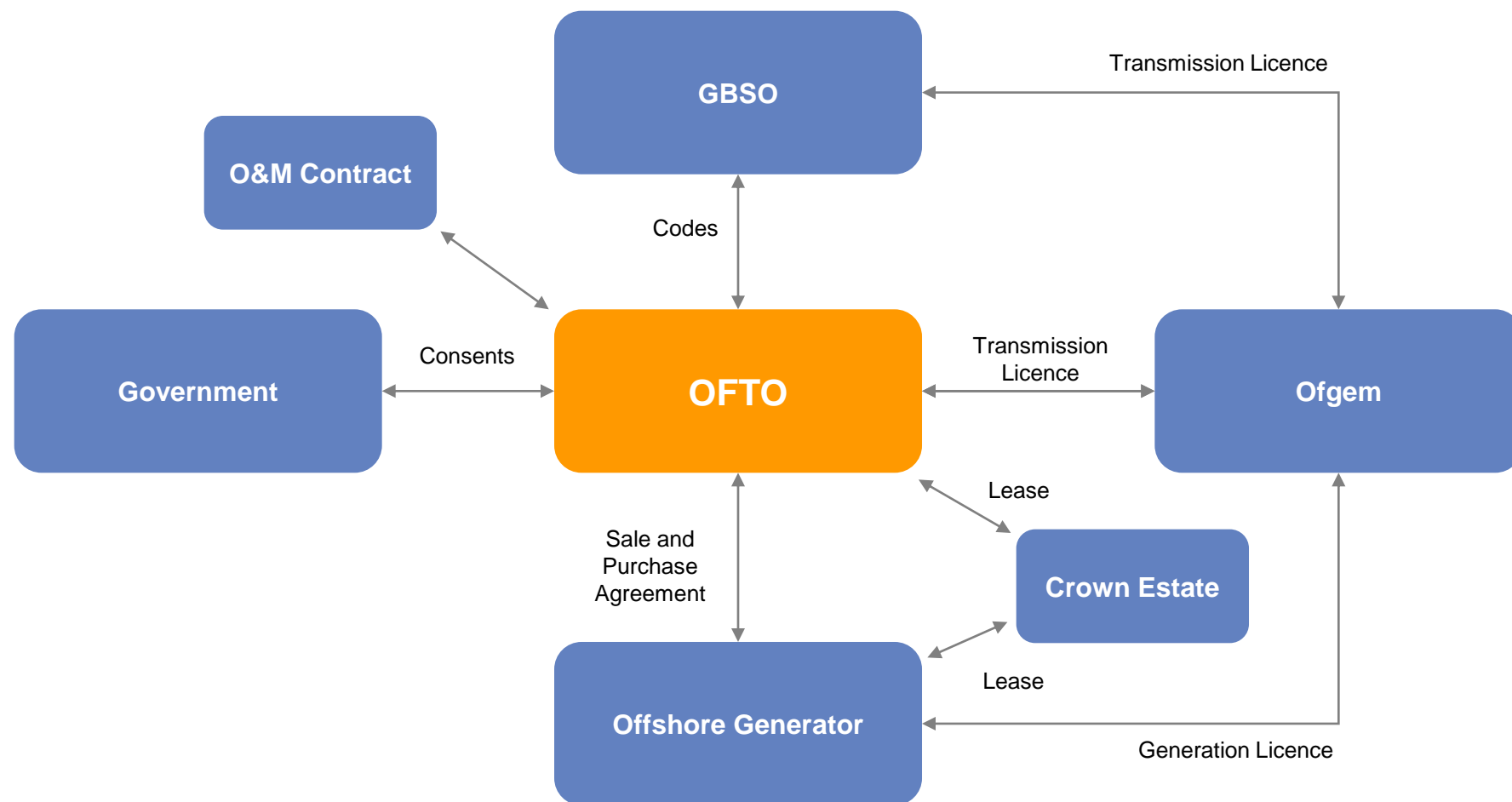
Engineering and
Maintenance

Current Transmission Owners





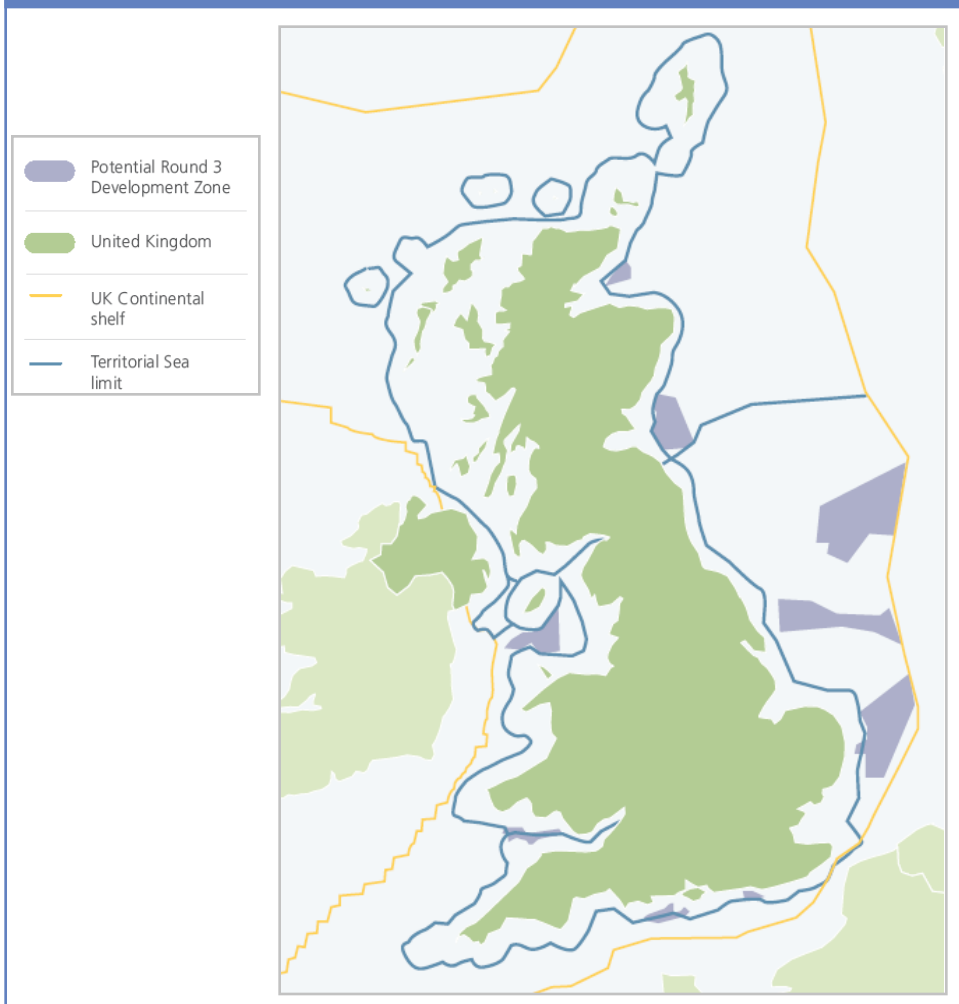
Offshore Transmission Commercial Structure



Development of offshore networks in Round 3

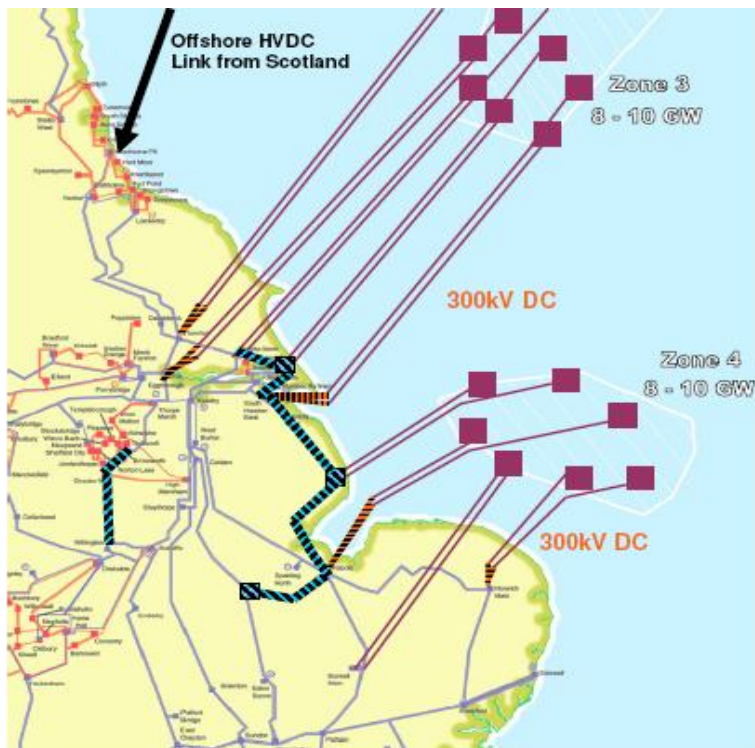
- Regime and tender process designed to allow flexibility for the future
- GBSO required to provide enhanced network planning information
- Developers can recover efficient pre-construction costs
- Two possible approaches:
 - Point to point connections
 - Integrated offshore transmission networks

UK Round 3 Development Zones



Point-to-point tenders

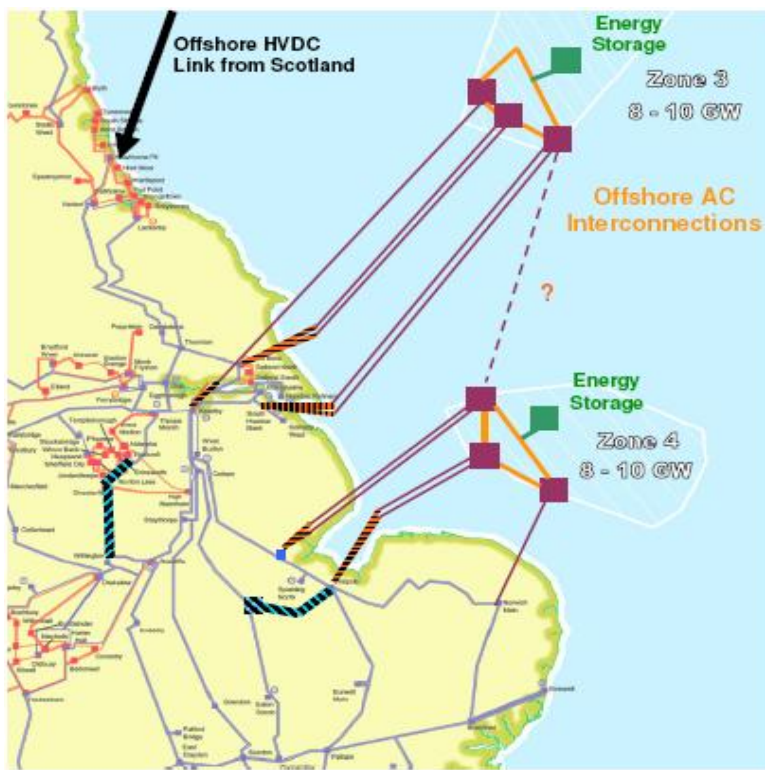
Example Structure



- Generator specific connections
- Avoids delays
- High capacity, low redundancy HVDC connections may minimise network costs
- Phased connections may be required by generators

Integrated network tenders (1)

Example Structure



- Scope for offshore generators to combine connection applications due to:
 - Crown Estate approach to leases
 - Strong commercial incentives

- Scope for new offshore inter-network connections to be developed by an existing OFTO (up to 20% additional cost before further tender triggered)

Integrated network tenders (2)

GB Transmission System Improvements



- Scope for offshore generator connections to have more than one onshore connection point
 - Subject to competitive tender process to select OFTO
 - Offshore transmission network will form part of GB transmission system once contracted

Key Benefits of the Regime

- For Generators
 - Delivers cheaper and more timely offshore grid connections
 - Focused on generator's requirements
 - Flexibility for future offshore generation needs
- For OFTOs
 - Encourage innovation through competition and enable new entrants to compete in the market
 - Long term regulatory certainty and light-handed regulation
 - Low risk – OFTO protected against generator failure and credit risk (and construction for transitional projects)

Section 3

Tender Process

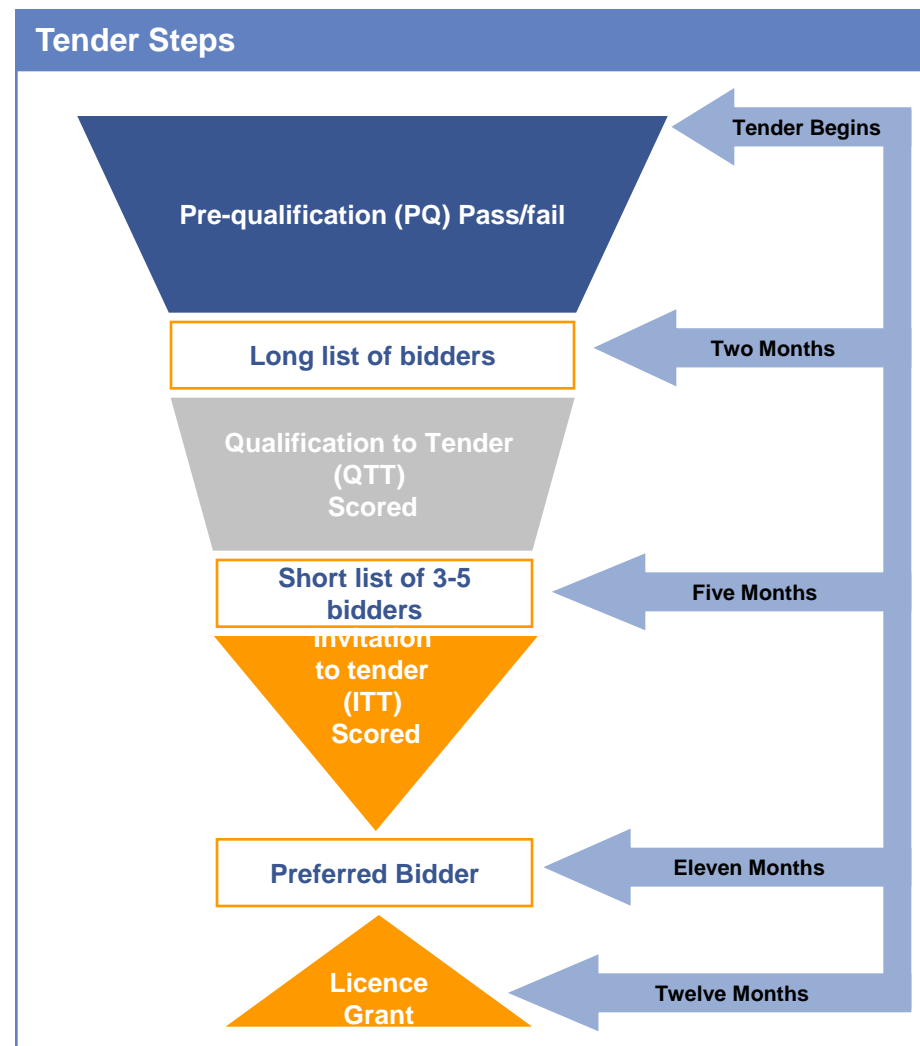
Stephanie McGregor, Associate Director

Aims of the Tender Process

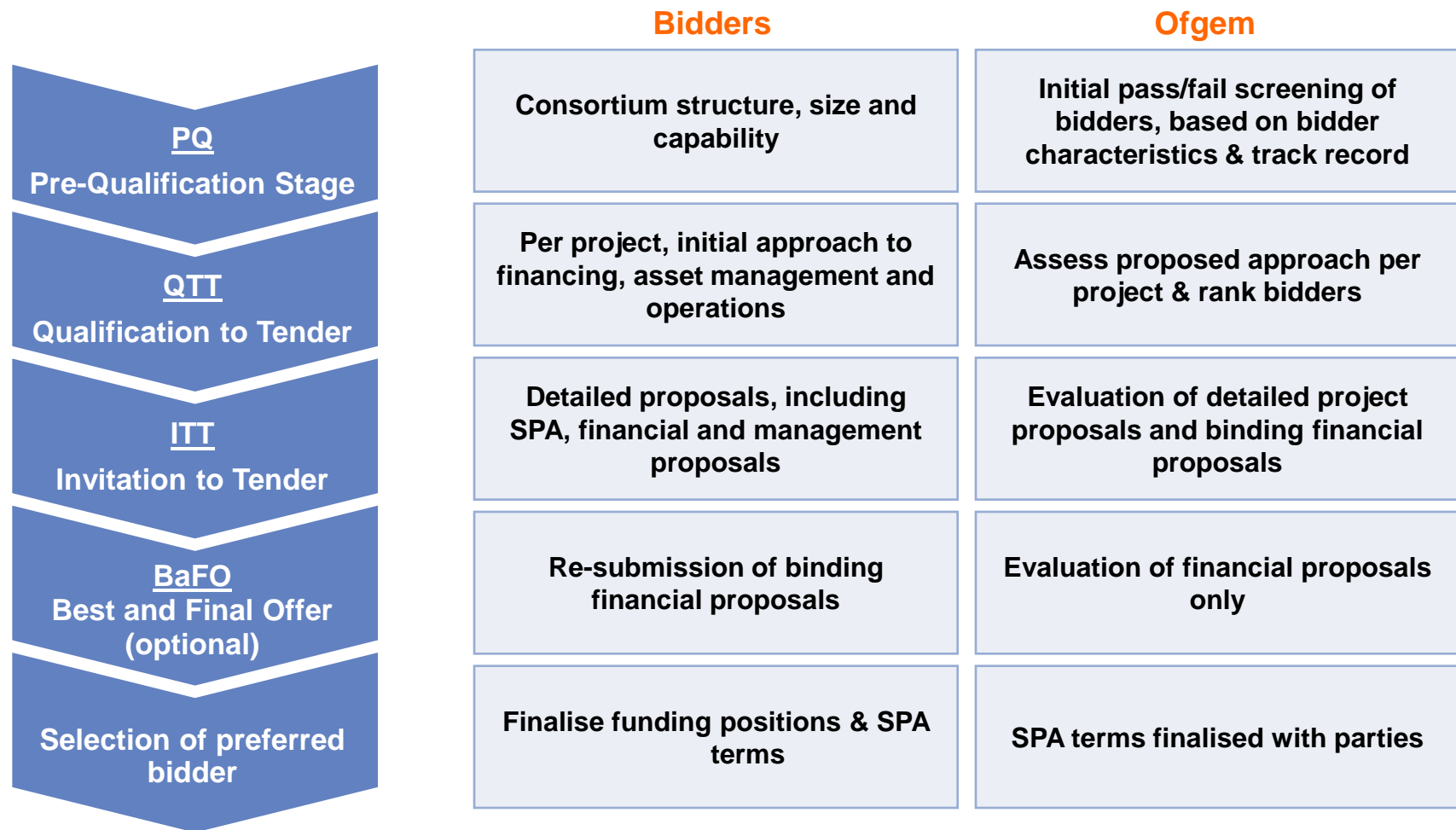
- Deliver fit for purpose offshore transmission infrastructure
- Provide certainty and best value to consumers through the competitive process
- Attract new entrants to the sector

Tender Process

- Final consultation on tender process, draft tender regulations and associated tender documentation underway
- Key issues consulted on include:
 - Refinements to design of tender process (PQQ, QTT, ITT)
 - Development of a model sale and purchase agreement (SPA)
 - Updated selection criteria and process for each stage of the tender process

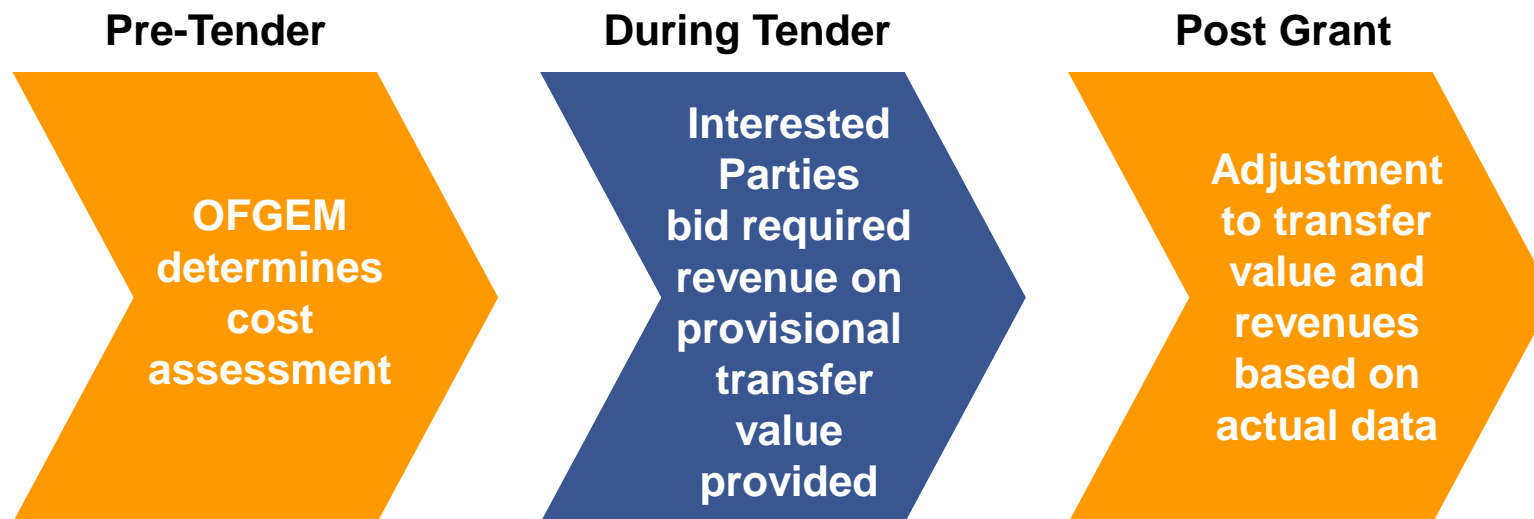


Steps in Tender Process



Ofgem's Approach to cost assessments

- Working with generators to determine the provisional transfer value
 - Cost assessments completed before the process starts
- Adjusted, formal cost assessments completed after commissioning of assets
 - Enable pass through of efficient costs actually incurred
- Assess whether the project has been / will be delivered in an economic and efficient manner



Key Points of the Tender Process

PQ	→	Generic response
QTT	→	Bids for individual projects
ITT	→	Bids for individual projects Dataroom available Variant bids for multiple project accepted

- Tender process seeking to minimise time between licence grant and asset transfer
- Approach to model sale & purchase agreement aimed at:
 - Achieving generic terms of transfer agreed with generators by QTT stage
 - Enabling structured dialogue to achieve agreement by end of ITT

Selection Criteria

PQ		QTT	ITT
Criteria / Methodology	Pass / Fail	Scoring/evaluation of initial approach	Scoring/evaluation of firm and final approach
Financial (60%)	Economic and financial standing	Economic and financial standing Economic proposals	Revenue stream Financing and commercial structure SPA
Non-financial (40%)	Organisation, ownership and governance Managerial and operation capability	Initial Approach: Management Legal Operational	Detailed Plans: Management, Legal and Operational Transition plan

Who are Ofgem looking for?

- Strong infrastructure/asset managers
- Financially robust parties, with good standing
- Experienced at managing and contracting with parties
- Comfortable with long term asset management
- Solid track record managing operating risks and obligations

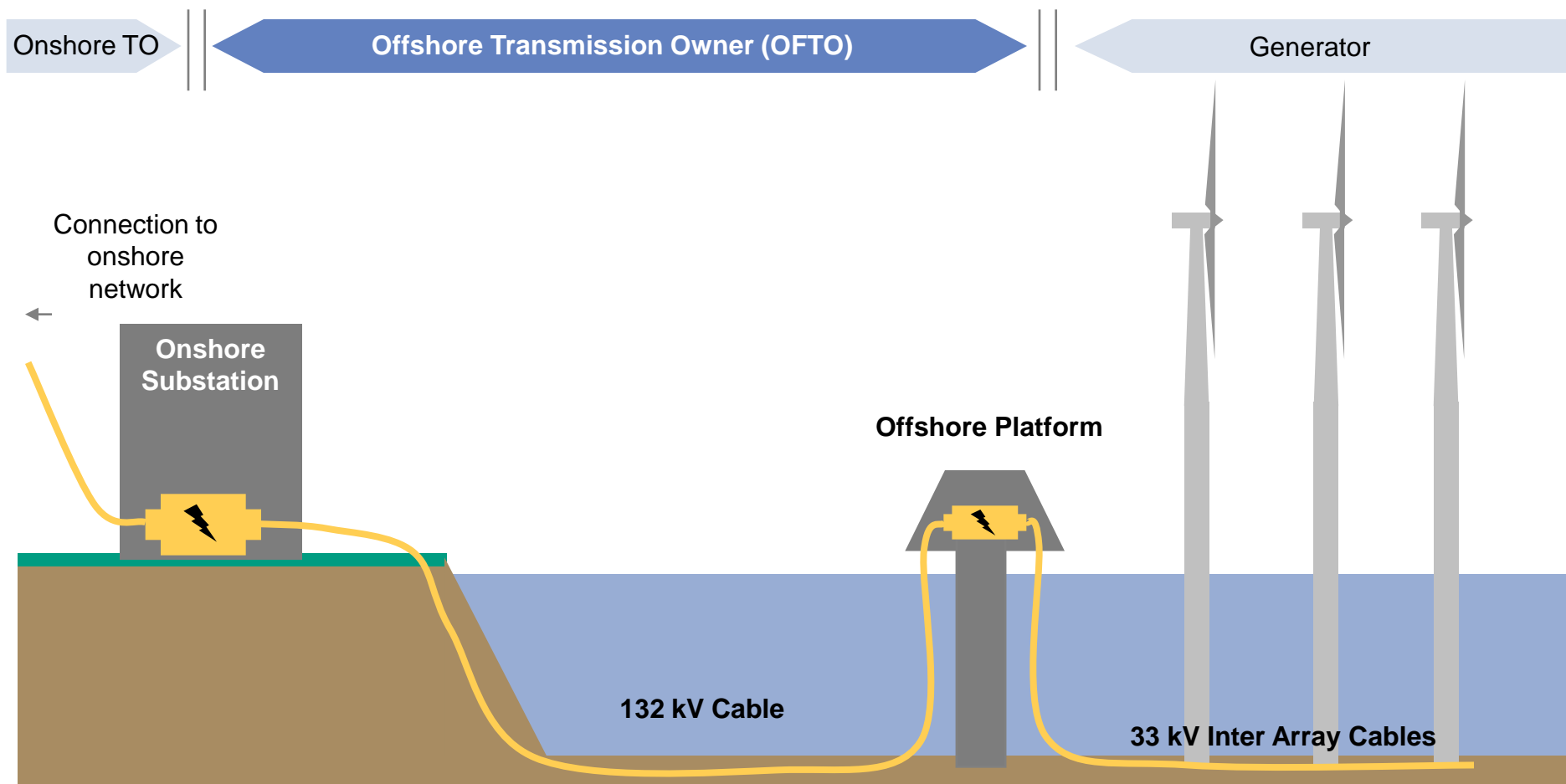
Section 4

Investment Characteristics

Lorna Shearin, Managing Director, RBC Capital Markets

What Assets Will the OFTO Own?

- Transmission assets between connection points: Onshore TO and offshore generator



What will be the ongoing responsibility of the OFTO?

**O&M for cable,
substation and offshore
platform**

Risk Management

Operational Performance

Compliance

Decommissioning

**Future capacity
development (up to 20%)**

Likely Transitional Projects

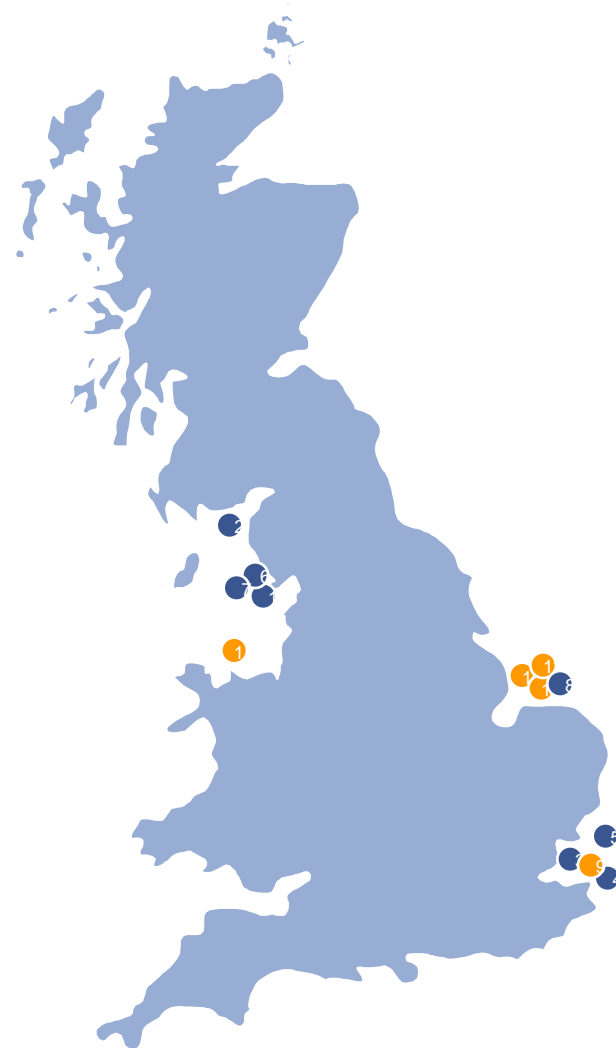
Projects likely to qualify for First Transitional Tender (£750m - £1.0bn)

	Project	Developer	Size (MW)	Exp. Completion
1.	Barrow	Dong Energy / Centrica	90	Operating
2.	Robin Rigg	E.ON	180	Jul 09
3.	Gunfleet Sands I & II	Dong Energy	172	2009
4.	Thanet	Vattenfall	300	*
5.	Greater Gabbard	SSE / RWE Innogy	504	Mar 11
6.	Ormonde	Vattenfall	150	Nov 10
7.	Walney 1	Dong Energy	178	*
8.	Sheringham Shoal	Statoil Hydro / Statkraft	315	Jun 10

Projects that may qualify for Final Transitional Tender (up to £1.5bn)

	Project	Developer	Size (MW)
9.	London Array	E.ON / Dong / Masdar	1000
10.	Lincs	Centrica	250
11.	Gwynt y Mor	RWE Innogy	750
12.	Docking Shoal	Centrica	500
13.	Race Bank	Centrica	500
7.	Walney 2	Dong Energy	183

* Awaiting date from developer



Investment Highlights – Transitional Process

Opportunity to enter UK transmission

- Rare opportunity to enter the UK transmission sector for new entrants
- Strong political and regulatory support for UK offshore transmission

Robust and transparent competitive process

- Structured to ensure fair and transparent process
- Qualification stages followed by ITT stage with data room access

Long term opportunity

- Up to £12 billion of new transmission assets
- Early participation will provide valuable experience for the enduring regime

Investment Highlights – Transitional Process

Long term revenue stream from GBSO

- 20 year regulated revenue stream
- Revenue stream not dependent on utilisation of transmission capacity or wind farm performance

Low risk assets

- No construction risk for assets in the transitional regime
- Limited ongoing O&M requirements

Opportunities for upside

- Efficiency savings, lower costs
- Revenue from additional services – increased capacity, non-regulated services, reactive power, availability performance
- Positioning in market for major future growth

Allocation of key risks between stakeholders

Generator

- Turbine failure
- Wind unavailability
- Energy risk (price, volume)
- Network specification
- Decommissioning of turbines

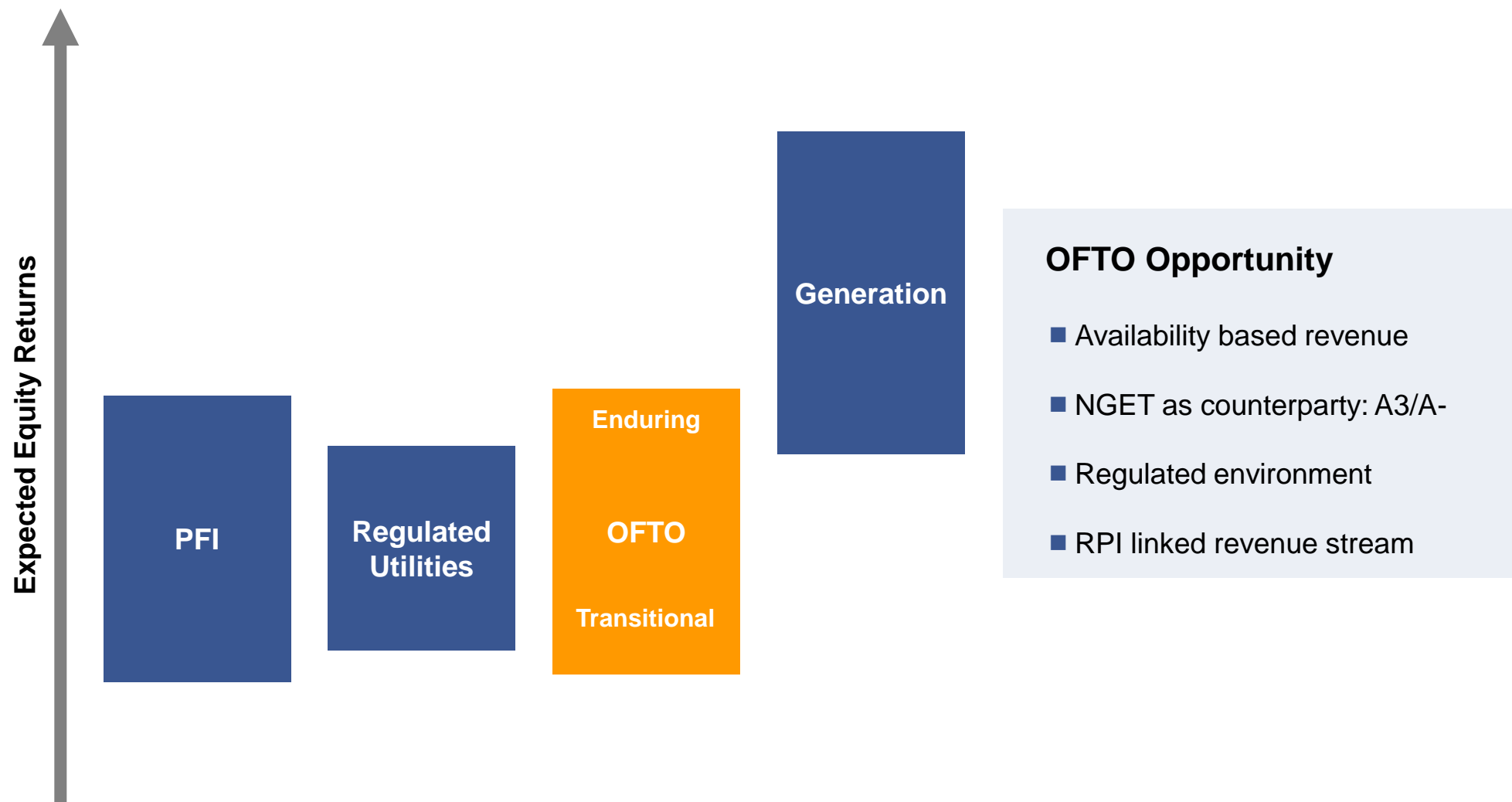
Consumers

- Generator insolvency or abandonment
- Credit risk of non-payment of charges by offshore generator

OFTO

- Operating risks
- Financing risk
- Decommissioning of transmission asset
- Construction (for enduring regime)

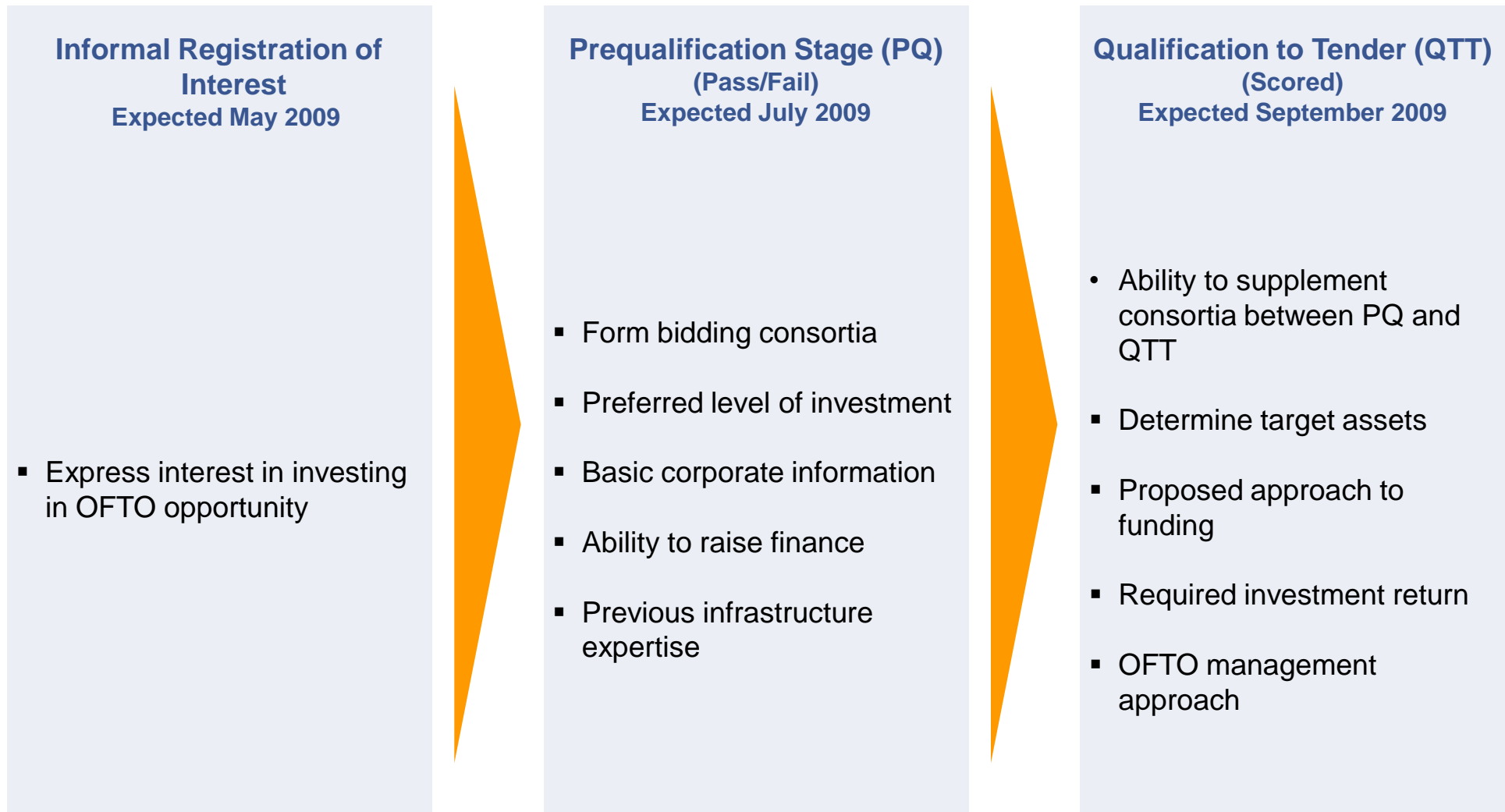
Potential Returns Against Comparable Opportunities



Debt Market - Offshore Transmission Opportunity Expected to Appeal to Lenders

- Good level of interest expected from debt providers for transitional regime due to:
 - 20 year regulated revenue stream
 - lack of construction risk and low operational risk
 - established insurance market
 - limited/no exposure to wind farm revenue or operational risk

Tender Process



Near Terms Steps for Investors

- Review the March consultation documents / provide feedback
- Explore consortia with the potential to meet the selection criteria, building in a strong infrastructure / asset management element
- Consider asset appetite and funding approach
- Develop a strategy for demonstrating satisfaction of the PQ and QTT selection criteria
- Register your interest with us and arrange a meeting if needed



Promoting choice and value
for all gas and electricity customers

Section 5

Panel Q&A

Panel Q&A

Alistair Buchanan, CBE	Chief Executive	Ofgem
Chris Barton	Director, Renewable Energy Strategy	Department of Energy & Climate Change
Robert Hull	Director, Regulatory Services	Ofgem
Stephanie McGregor	Associate Director	Ofgem
Lorna Shearin	Managing Director	RBC Capital Markets
Rob Winchester	Partner	Ernst & Young

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