Notes from RPI-X@20 Innovation working group held on 19th May 2009

Ofgem provided loose terms of reference the key aspect of which is that it is not a decision making group, rather a forum for discussion. The scope of discussion should include all gas and electricity networks. Total of three working group meetings culminating with a final deliverable – yet to be defined. The group can seek views from parties outside the immediate working group.

Four key questions to consider:

1. What is innovation in the context of the energy networks?
2. Is more innovation in the energy networks needed?
3. How have the existing initiatives performed?
4. Are there other models that could facilitate more innovation?

Summary of key points from the discussion around the above 4 questions:

- Technical innovation has evolved over time under the current regulatory framework. Circumstances now mean that a more "proactive" approach to innovation is required? Are there models in eg USA energy sector that specifically tackle innovation?
- The need for further innovation is being driven by many things including:
    - Climate change issues;
    - Efficiency;
    - Cost effectiveness;
    - Quality of supply;
    - Uncertainty around supply/demand volumes and locations;and
    - UK plc competitiveness in the wider global market.
- More innovation means increased risk for network companies, thus changing the risk profile of networks. Potentially therefore need a higher rate of return attributed to innovation projects or a higher rate of return more generally to reflect the higher risk profile faced by the companies. Appropriate allocation of the cost of risk between companies/shareholders and customers.
- IFI and RPZ initiatives have been successful. The scale of project tackled under IFI may be limited due to the "tie" to allowed revenue.
- IFI has been successful at the "lab" stage but perhaps not so successful at ultimate roll out.
- RPZ is positive but its limited scope in relation to DG schemes is restrictive.
- A common and clear "GB" objective/goal is likely to encourage larger-scale and co-ordinated innovation as demonstrated in workgroups tasked to review how to achieve the 2020 targets – the industry will deliver.
- Going forward the regime needs to allow a more co-ordinated approach to innovation.
- The introduction of smart meters must take into account the needs of the networks not just the direct needs of customers/suppliers.
- The group agreed that it is the WHY; HOW and WHO of innovation that needs to be considered rather than the "what".
- There are essentially three things to consider in the context of innovation:

- Market/Regulatory structure – does this limit the scope for innovation? Eg electricity networks can not own generation for demand/system management; eg gas transporters cannot contract directly with end users for demand side management. Do the ring-fencing/business separation conditions restrict innovation?
  - Commercial issues – eg is there freedom to be commercially innovative?
  - Operational issues – eg are incentives on other things reducing the incentive to innovate?
- Flexibility within the regulatory regime is necessary to enable innovation – the framework must not unduly restrict the potential scope of innovation. Re-openers are not desirable.
- Regulatory risk associated with the treatment/funding of innovation must be minimised so that innovation is not stifled in the risk of a "failed" scheme not being "allowed".
- Possible to link rewards for innovation to the outcomes delivered, although recognising that the outcomes that occur may not be obvious at the start (or sometimes the end) of the process?
- Should innovation be ring fenced? Different rate of return?
- The 5-yr review process allows Ofgem to monitor levels and costs of innovation. However, there is the potential for the 5 year regulatory period to constrain innovation as it makes it difficult for emerging innovation to be accommodated where this emerges during the regulatory period.
- What needs to change to encourage further innovation and for Ofgem to be comfortable with the associated additional risk?
- Funding options include: regulated, government or European funds.
- Can see there being three tiers of innovation with potentially different regulatory treatment/returns:
  - Company specific and relatively small-scale;
  - Joint projects between one or more companies or larger-scale individual schemes; and
  - Large-scale, co-ordinated and potentially high cost schemes.
- Evolution or revolution? Believe can build on success of existing initiatives such as IFI and RPZ; and co-ordinated workings to achieve a common goal.

Actions:

1. **All** to consider the meeting note and areas that could potentially be progressed at the next meeting, particularly in terms of models that could be developed as part of the working group process;
2. **Ian Welch** to request a short note from colleagues regarding the frameworks in place in US energy networks to encourage innovation