

The background features a large, semi-transparent white arrow pointing from the left towards the right. Behind the arrow, there is a blurred image of a modern building with a glass facade and a large, glowing, multi-tiered structure that resembles a stylized flame or a modern architectural element. The overall color palette is dominated by blues, oranges, and whites.

Flexibility and Capacity working group

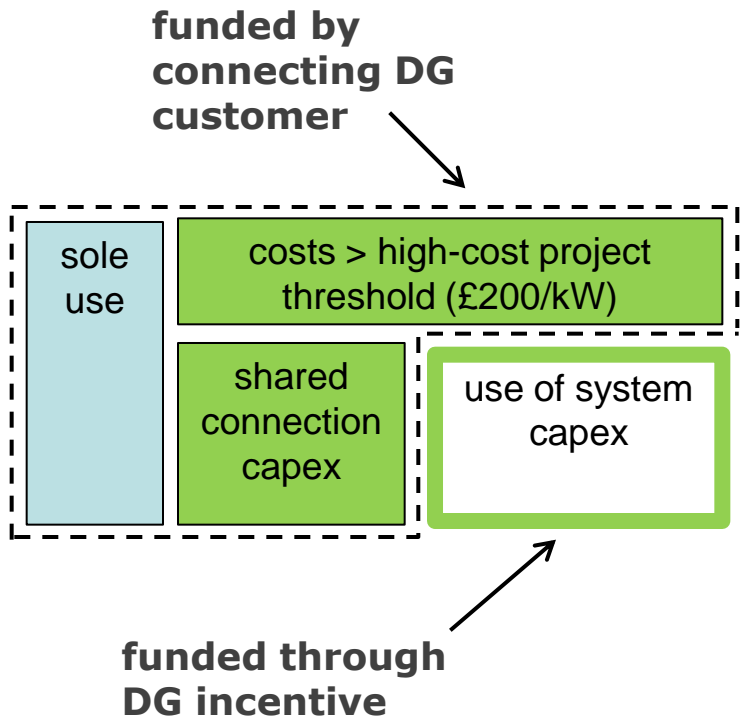
11 July 2012

Updates

- Introductions
- Minutes
- Update on other RIIO-ED1 and Smart Grids Forum

DG incentive

DG incentive framework



- 80% pass-through of UoS capex, annuitised over 15 years
- Incentive £1/kW/yr
- Incentive capped/collared: 2 x WACC/cost of debt based on UoS capex
- O&M £1/kW/yr
- Incentive based on average forecast cost of UoS capex plus 1% enhanced RoR
- Also network access payment (equivalent of guaranteed standards of service) for DG not on bilateral contracts: £0.002/kWh

- all connectees

- connections that require network reinforcement

Issues:

From DPCR5:

- £1/kW/yr – average figure based on (very) forecast data (and generous)
- Actual connection costs vary significantly – but for DPCR5 couldn't find any correlation (ie to size, generation type)
- Majority of DG connection does not involve UoS assets
- O&M – no evidence of costs, and no differentiation between what is funded through DG incentive, and through allowed revenues
- Difficulty in creating RIGs when defining a DG connection (for schemes)

Questions:

- Does DG incentive framework actually incentivise behaviour (ie drive to connect DG more efficiently)?
- Does it provide any incentive to improve interactions with the customer?
- Is there still a rationale to treat DG connections differently to other connections (especially other low carbon technology connections)?
- How does it work for IDNOs (and materiality)?

Lunch

Discussion on outputs and incentives

Responses to Ofgem's outputs questions

- Option 1: Standard reliability outputs: minutes lost and customer interruptions targets

- **Does this cover power quality?**

No. At present no cost justification to support an increase in power quality standard for networks. Cheaper to mitigate customer equipment.

- **Does this incentivise long term efficiency?**

Incentivises sustained performance improvements. In isolation could theoretically lead to increased investment at the margin, but the balancing effect of IQI tempers this.

- Option 2: Standard reliability outputs plus DNO commits to a reduction in network loading at LV (secondary deliverable)

- **Intended to incentivise long term approach (ie prevents sweating assets)**

Reliability outputs already incompatible with long term asset sweating

- **Intended to incentivise provision of capacity (ie prevent network constraints.)**

Difficult to incentivise required capacity rather than capacity per se

- **Can all DNOs measure LI's at LV (efficiently?)**

Not efficiently on LV (though possible at HV/LV transformation points). LI information too patchy on networks to be a useful measure.

- **Do we need anything on top of standard reliability incentives?**

Possibly nothing extra as long as penalties are strong enough. May need an incentive not to over-invest. No simple deliverable for power quality.

Reliability Incentive (IIS)

Incentivise DNOs to invest in their LV network to maintain reliability and minimise interruptions to consumers supply

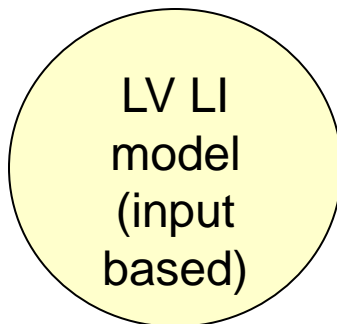
Network problem arising from increasing load/generation from domestics	What current outputs drives DNO to resolve these problems
Fuse blows in LV substation and cuts supply to customers on the feeder	IIS – DNO incentivised to reduce customer interruptions and customer minutes lost
LV feeder is more heavily loaded, runs hotter and ages more quickly (but substation fuse doesn't blow).	Highly likely to trigger faults longer term and be picked up under the IIS

- IIS seems to pick up most issues caused by increasing load and generation at LV (although not power quality - BMCS)
- Should drive DNOs to be proactive and respond to increases in low carbon technologies at LV

Reliability and safety working group LV LI proposal

1. Forecasting ex ante allowance for business plans

DNO makes forecast load assumptions for RIIO ED1

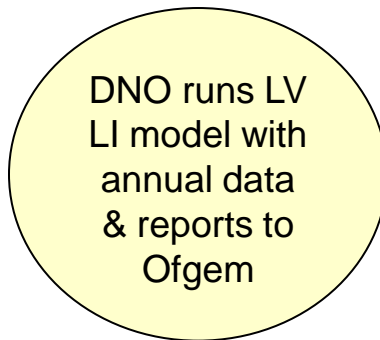


DNO uses model to forecast ex ante allowance based on the number of LI 'problems' it forecasts it will need to resolve in RIIO ED1

and/or

2. Potential use as uncertainty mechanism

DNO takes annual actual data from network



Potential to fund DNO on £ per problem solved or use data to monitor whether number of 'problems' solved fall within pre set 'dead band' agreed within ex ante allowance

3. Secondary deliverable

Ofgem collects annual data on LI problems solved to compare to original number forecast. Can also monitor movement in LIs against expenditure and original aims in business plan.

Initial conclusions

LIs supplement IIS as a secondary deliverable:

- Allows Ofgem to monitor the investment made to reduce loading & maintain reliability
- Companies can use movement in LIs as a commitment in business plan alongside IIS
- No right answer, just supporting evidence that Ofgem can monitor

Information Quality Incentive (IQI)

Under IQI sharing factor DNOs retain a proportion (around 50%) of any under spend against ex ante allowance

Company spends £8
Under sharing factor it received
50% of £2 under spend = £9 total
Customer pays £1 less
Company gains £1 extra ←

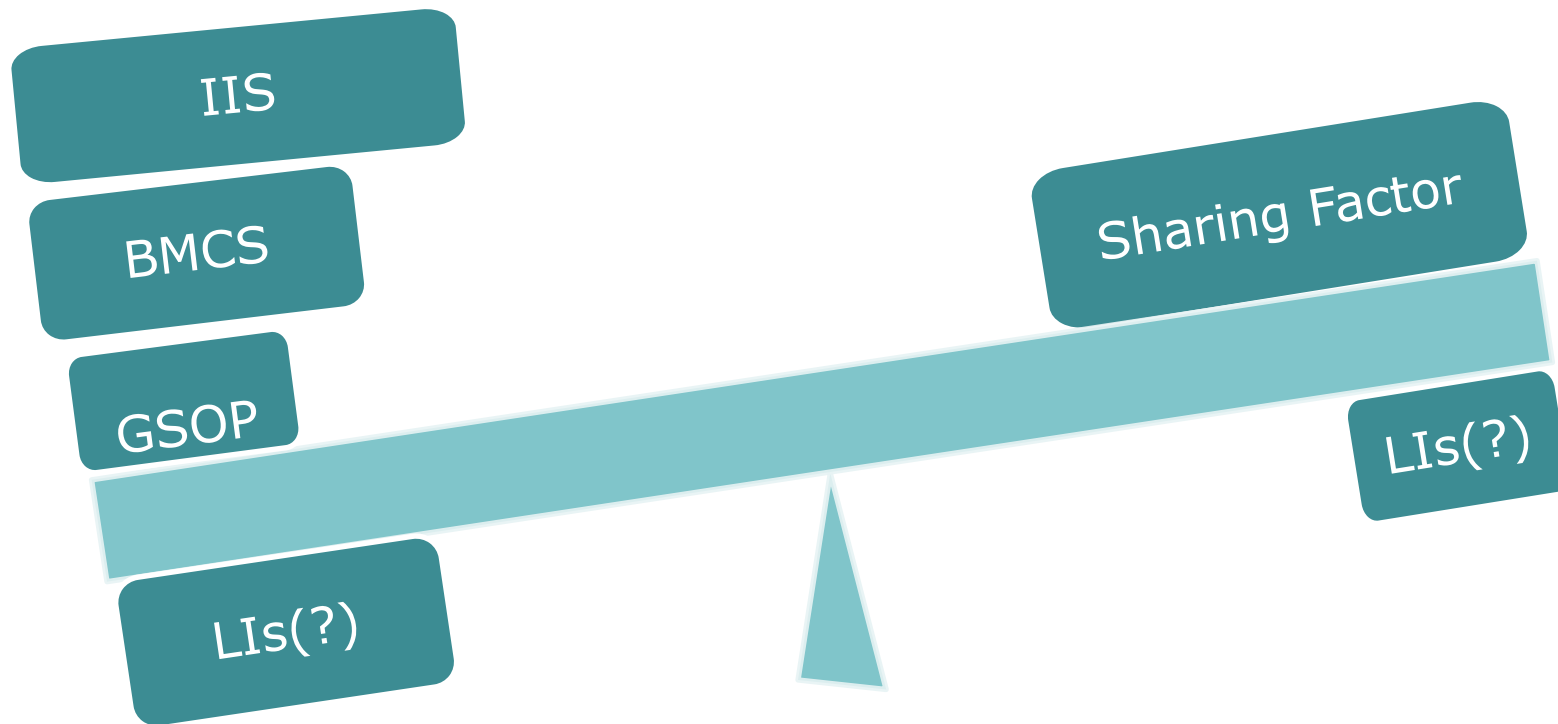
£2 Overspend
£10 Ex ante Allowance
£2 under spend

→ Company spends £12
Under sharing factor it receives
50% of £2 over spend = £11 total
Customer fund £1 extra
Company funds £1 extra

**Sharing factor provides a strong incentive for DNOs to be efficient
Should incentivise use of innovative techniques where they are more efficient
than traditional methods**

Outputs/Incentives – Existing LV

Reliability is maintained at the most **efficient cost**



A.O.B

- Next meeting – Wednesday 1 August
 - Olympics start 28 July
 - Potential locations outside London: Birmingham or Glasgow
- Topics for discussion next time
 - Update on SGF Work Stream 6
 - Anticipatory investment
 - Scenarios and uncertainty mechanisms
 - Paper on the role of DNOs

The background of the slide is a composite image. On the left, there are rows of solar panels under a bright sun. On the right, a hand is shown holding a white document. In the bottom left corner, a blue gas burner is visible. The overall theme is energy and customer service.

ofgem

Promoting choice and value
for all gas and electricity customers