

Managing the queue

Northern Ireland

Present system

- Applicants require planning permission before a Connection Offer can be made
 - This improves ability to achieve renewables targets by reducing capacity hoarding
 - This can produce inefficiencies in network development
- Clustering arrangements are designed to reduce network inefficiencies and interactivity of offers
 - This requires urgent sign off on principles paper by NIAUR as first cluster is already outside time limits

Planning under the licence methodology

- Each application is considered against the same generation background as any other offer
- That means that each offer assumes that no other offer exists
- No account is taken of “common” reinforcements
- One acceptance can cause revised offers for others
- May impede the development of an efficient and economical system
- May prevent certain developers from ever connecting

Existing Principles

- All parties are kept in their position in the queue in respect of their Connection Application dates.
- If for any reason NIE cannot provide an Offer within 90 days (as in the case of the first cluster) the developers who applied with planning permission are not disadvantaged.

Offer Characteristics

- At present network constraints are identified and taken account of for n-1 conditions
- The developer may seek to minimise constraint periods at n-1 (line trip) through seeking a special protection scheme which reduces the time of constraint to post-fault periods. If this can be done safely NIE seeks SONI support and arranges a scheme
- n-m-t (maintenance plus line trip) may require the developer to agree to non generating periods in each year to allow network maintenance.
- Network unconstrained capacity is on a first come first served basis

Problems with the combined effects of SONI curtailment and Network Constraint STRATEGY QUESTION

- If there is an **unacceptable** level of **curtailment**, so that reasonable developers could **not** invest, it is difficult for a network owner to invest to connect those windfarms
- How could a Regulator allow the network investment?

Designing Queue Tactics - Objectives

- Allow network development sufficient for connection of economic renewables projects
- Avoid creating inefficient network investments
- Respect and retain rights and timings of developers who have been granted planning permission

Hint:

The EirGrid Gate system offers some advantage here

Tactics - Things to avoid

- Making investment in network impossible
- Creating excess network capacity with associated cost and environmental impact
- Creating an uneconomic level of curtailment on the system
- Creating inequitable treatment of potential network users
- Creating complex commercial systems which are confusing and opaque

NIE Ideas

- The industry – probably at IWEA level could work with NIE, SONI and EirGrid to establish a level of curtailment, constraint which is deemed reasonable by all market participants.
- If offers are made up to this curtailment level, the 90 day rule for accepting an offer and paying the construction deposit applies. Over this level it is noted that it would be unreasonable for a developer to pay 20% of connection costs up front to stay in the queue since there is no opportunity to fund the project.
- It is desirable that developers' positions in the queue are preserved as they may have spent significant sums (up to £3m) by that stage.

Issues with this Idea

- Project viability may be individual
- How should we determine the trigger point for allowing connection offer acceptance with delayed effect (MEC bond)?

Scenario 1 – Small Curtailment

- Where curtailment is limited and the developer's project is economically viable then network efficiency is the key driver.
 - Connect in the area of the network with spare capacity
 - Connect in an area of the network but accept a level of network constraints
- This means that the queue is preserved as now.

Scenario 2 – Starts with Small Curtailment

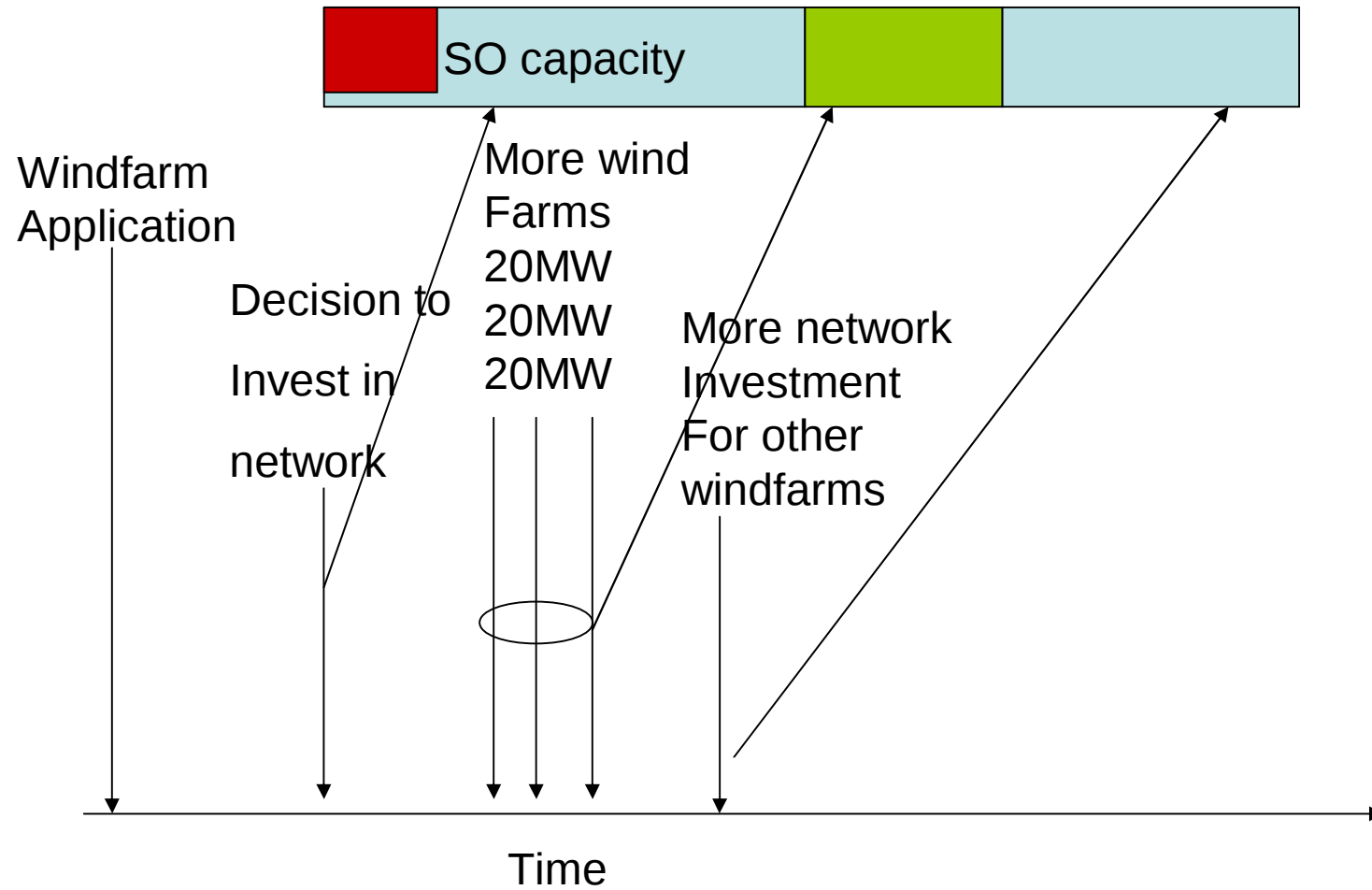
- Suppose that a set of projects require significant network investment. Much of the cost of that network investment is carried by customers at large. The planning consents for projects expecting to use the additional network capacity could span the time when there was small curtailment into a period when new projects become unviable.
- This happens because other projects outside the network constrained area use the capacity which is limited by SONI for technical system operation reasons or requires significant curtailment.
- This would create excess network capacity through network investment provided by customers at large.
- No utility or Regulator would be likely to allow significant network investment carrying this risk.

Scenario 2 - Proposal

- NIE / SONI calculates the minimum amount of additional connection MW required to make effective use of the asset and reserves this block up to a SONI technical system operational limit or significant curtailment, hence preventing other use of that capacity.
- This allows network investment
- It disadvantages developers outside the area of investment area impact
- Developers who have access to network capacity can accept a Connection Offer on provision only of an MEC bond. This allows their offer to be delayed but preserved until the SONI system operation technical limits or significant curtailment are relaxed. This may result in additional low constraint capacity being released.

Scenario 3 – Serious Curtailment already exists for new entrants

- The same principles apply but SONI identifies:
 - The issues that need to be resolved to release further blocks of lower curtailment capacity;
 - The research or work needed;
 - Any timetable for the research or work.
- All new developments are equally disadvantaged now
- Precedence is still given to identified zones with customer-at-large network investment, except that developers preserved in the queue by payment of MEC bonds must receive the low curtailment capacity in their precedence order



The urgency

- We will need comments soon as we are approaching the time of making offers.

Comments and
Suggestions
Please