DN Connection policies - entry

Presentation to Energy Market Issues for Bio-methane group
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Transporter Obligations

- Gas Act is largely silent on Distributed Entry
  - Obligation to develop economic and efficient system rest of section 9 relates to exit
- Gas Calculation of Thermal Energy Regulations
  - Obligations on measuring CV and regulations on FWACV
- Gas Safety Management Regulations
  - 8.—(1) No person shall, subject to paragraphs (2) to (4), convey gas in a network unless the gas conforms with the requirements specified in Part I of Schedule 3
  - Part 1 of Schedule 3 Defines gas quality parameters and requirement to odorise
- Licence - D12 is key condition
  - 3b terms that offer up to the maximum flow rate available from time to time on the pipe-line system to which this licence relates at the time of the offer, unless the applicant requests a lesser flow rate than the maximum available;
  - 4 Requirement to offer terms as soon as reasonable practicable and in any event no more that 6 months after application containing all information reasonably required is received
  - 6 Requirement not to discriminate unduly
- UNC TPD Section I
  - Section 2 covers Network Entry Agreements
  - Section 3.11.6 Liabilities on DN for failure to take gas at a LDZ System Entry Point –

    5 * shortfall between actual and agreed capacity * daily entry transportation charge

Ownership

1) Minimum connection

Valve that DN has right to shut and sole right re-open and communication system to enable it to receive data on gas quality. There may be slight differences between GTs on what is required.

Minimum Connection to be constructed and owned by transporter as this is essential equipment that prevents the entry of non-compliant gas into the transporter's system

Ownership options

	Biomethane Producer	Funding	Ownership	Maintenance	Network Operator	Comment
Option 1 (Current GB DN Model)					Zero RAV	Seen as potential barrier to entry inconsistent with electricity
Option 2 (German Model)	Service Charge				Funded through RAV	Need to justify all customers funding entry connection
Option 3 (Dutch Model)	Plant built to Network Operator Specification				Set Specification (NEA)	
Option 4	GT Licence model				Connected system	Entrants do not wish to be GT
Option 5 Part ownership (after Mod 0391)		As option 6		Minimum Connection & Odorant facility	Part ownership of entry facility	Supports competition with GT owning minimum connection and odorisation
Option 6 (after Mod 0391)		Funding recovered through entry capacity charge			Full ownership of entry facility	Option where entrant does not want to own entry facility

Based on original REA slide

Ownership

2) Rest of DN Entry facility (hereafter called Entry facility)

Transporters support a competitive market in the ownership and operation of the Entry facility excluding the minimum connection. Entry facility can be procured by owner of production facility and owned & operated by owner of production facility or third party.

- Entry Equipment needs to contain, GSMR compliant monitoring equipment, CV monitoring, ROV and protection against under and over pressurisation
- Odourisation is a complex area and requires monitoring and testing both at Entry Facility and the system,
- Under odorisation results in non-compliant gas
- Over odorisation results in additional Public Reported Escapes
- *Given that odorisation requires tests to be done downstream of odorisation point there is an argument that the transporter needs to be responsible for odorisation. May be differences in approach between GTs*

Ownership

Illustrative costs and liabilities based on 300m3/hour and connection to MP pressure tier

	Example Capex	Example Opex	Example yearly transportation capacity charge under UNC Mod 0391	Example maximum daily liabilities for failure to take gas under UNC TPD I 3.11.6
1) DN owns minimum connection only	£100k	£0	-£1,667	£0
2) As (1) plus odourant	£150k	£5k	£7,692	£105
3) DN owns entire entry facility	£500k	£10k	£43,206	£592 (1)

(1) Approximately 10% of RHI received if gas had flowed

Ownership

3) The Network Entry Agreement (NEA) would contain clauses relating to the operation of the Entry facility and the provision of information to the transporter to enable them to be satisfied that its operation would not compromise the safety of the transporter's system

Each transporter would be responsible for its own NEA

- Metering to meet accuracy required for entry metering
  - Entrant will need to be able to demonstrate that metering is properly installed, calibrated and maintained to ensure continued reliability and accurarcy
- Quality schedules will be common and reflect output of EMIB expert group
- Likely to be limited to requirement to comply with GS(M)R schedule 3 but entrant will be required to
  - Warrant that no non-compliant gas will enter transporter's system
  - Demonstrate that failure of systems or presence of non-compliant gas will result in closure of ROV
  - Demonstrate regular maintenance of systems, ROV etc.
- Commercial terms may differ, experience with NExAs is that other parties frequently want changes made resulting in differences between NExAs

Standards of Service

- Currently all entry connections are defined as Sufficiently Complex Jobs in 4B statements
- Transporters will develop SoS for entry connections where the transporter is monopoly provider of services for example information provision and construction of Minimum Connection
  - Unlikely to be fixed price in short term
  - ***Is this approach appropriate?***
- Competitive market for construction of Entry facility means that developer can stipulate KPIs and liquidated damages as part of procurement process. They will also be able to design in back up systems if required.
- SoS will need to take into account possibility that entry connection is made to IGT network which then needs to speak to upstream network regarding capacity

Liabilities for failure to take gas

There are two potential reasons for failure to take gas

1. Equipment failure
2. Capacity constraints
   a. Change in exit demand for a single or very small number of exit customers
   b. Change in exit demand from a larger number of exit customers where a single exit customer is not directly responsible

Liabilities – equipment failure

- Equipment owned by the DN (minimum connection) - In the highly unlikely event of failure of the Minimum Connection which would be repaired as soon as possible. DNs liable to pay liabilities as defined in UNC section I.
- Entry Equipment - in a competitive model these would be determined as part of the commercial terms of the competitive procurement event and should not be prescribed externally

Liabilities – capacity constraints

a. **Change in exit demand for a single or very small number of exit customers**

   GDNs believe that it would not be possible to offer entry capacity to distributed gas producers on the basis of the demand of a single or a very small number of exit customers, as there can be no assurance that the customer(s) will be taking gas off the local network on a 24/7/365 basis. In this case either reinforcement / compression will need to be specified and paid for up front (or in an entry charge), or the GDN will not be able to offer capacity over and above diversified demand. This is a reasonable interpretation of D12 3b.

b. **Change in exit demand from a larger number of exit customers where a single exit customer is not directly responsible**

   Transporter would need to reinforce system (if possible), if this is funded by transporter would this be regarded as efficient expenditure by Ofgem?

When does (a) turn into (b)?

Next Steps

Further work

- Consultation on Standards of Service
  - Ofgem has stated that it expect DNs to develop voluntary SoS
  - ENA badged on behalf of transporters, expect in early 2012
- Consultation on Connections policy
  - Will be required if Mod 0391 is agreed as connection entry connection boundary will change and 4B statement will need to change
- DNs to develop Reinforcement policy for entry connections
  - Changing capacity issue
  - Multiple entrants on same part of network including shared use of compression
- No Consultation required for liabilities as this is set out in UNC and we are not proposing any changes
- Need to connect plants, gain experience and then revisit some points in light of learning