

Update on Single Code Development Process

9 November 2016

The logo for Firstgas, featuring the word "First" in a bold, sans-serif font, followed by "gas" in a lowercase, sans-serif font. The "g" is stylized with a flame-like shape integrated into its loop.

- Purpose of today's session
- Themes emerging from consultation so far
- Proposed objectives for the new code
- Principles for determining scope and depth of new code
- Update on options being considered
- Update on IT system to support new code
- Current thinking on supporting arrangements
- Next steps

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- Update stakeholders on what we have heard
 - Test some lines of thinking / emerging views
 - Keep the conversation going about what a new code might look like
 - Provide another opportunity for stakeholders to shape the options paper
 - Not presenting specific options (yet)
-
- “Devil is in the detail”... but decisions on the details need a clear direction

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- Widespread agreement on the need to change (status quo is not an option)
 - Documented by GIC, PEA and industry working group
- Opportunities for improvement lie in:
 - Ensuring right balance of roles and responsibilities. Current codes “externalise” costs and risks
 - Providing greater flexibility. Current codes are fairly rigid
 - Simplifying arrangements to reduce administration / compliance costs
- Start with fit-for-purpose set of arrangements and expand as required
- Transparency – releasing information in a form it can be used
- User input valuable when implementing IT solution

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Proposed Objectives

- Enable the use of gas
- Minimise the cost of transporting gas
- Keep it simple
- Promote flexibility
- Increase transparency

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What does this mean?

- Remove barriers
- Limit uncertainties
- Provide confidence in gas transmission
- Promote gas market development
- Consumer focus

Proposed Objectives

- Enable the use of gas
- Minimise the cost of transporting gas
- Keep it simple
- Promote flexibility
- Increase transparency

What does this mean?

- Efficient allocation of responsibilities
- Provide services that are valued
- Use incentives / prices
- Deal with scarcity and congestion as and when it arises

Proposed Objectives

- Enable the use of gas
- Minimise the cost of transporting gas
- Keep it simple
- Promote flexibility
- Increase transparency

What does this mean?

- Keep admin costs low
- Builds trust
- Use of conventional approaches
- Supports tried and tested IT solutions

Proposed Objectives

- Enable the use of gas
- Minimise the cost of transporting gas
- Keep it simple
- Promote flexibility
- Increase transparency

What does this mean?

- Not one size fits all
- Ability to choose services that provide value
- Trade-off with simplicity

Proposed Objectives

- Enable the use of gas
- Minimise the cost of transporting gas
- Keep it simple
- Promote flexibility
- Increase transparency

What does this mean?

- Builds trust
- Enables timely decisions
- Needs to be in usable format
- Strong link to IT solution

Proposed Objectives

- Enable the use of gas
- Minimise the cost of transporting gas
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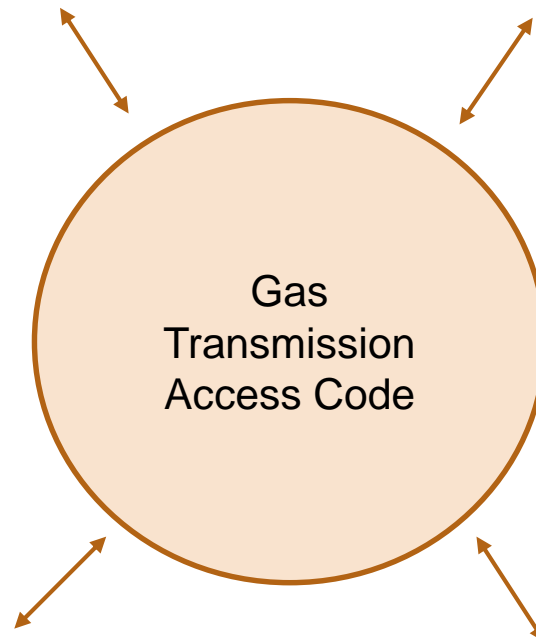
Regulatory Objective

- Efficient operation of the transmission system and use of pipeline capacity
- Competition in upstream and downstream markets
- Efficient investment in pipelines

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What's in?

Code should govern matters that materially affect service levels or cost of most/all network users

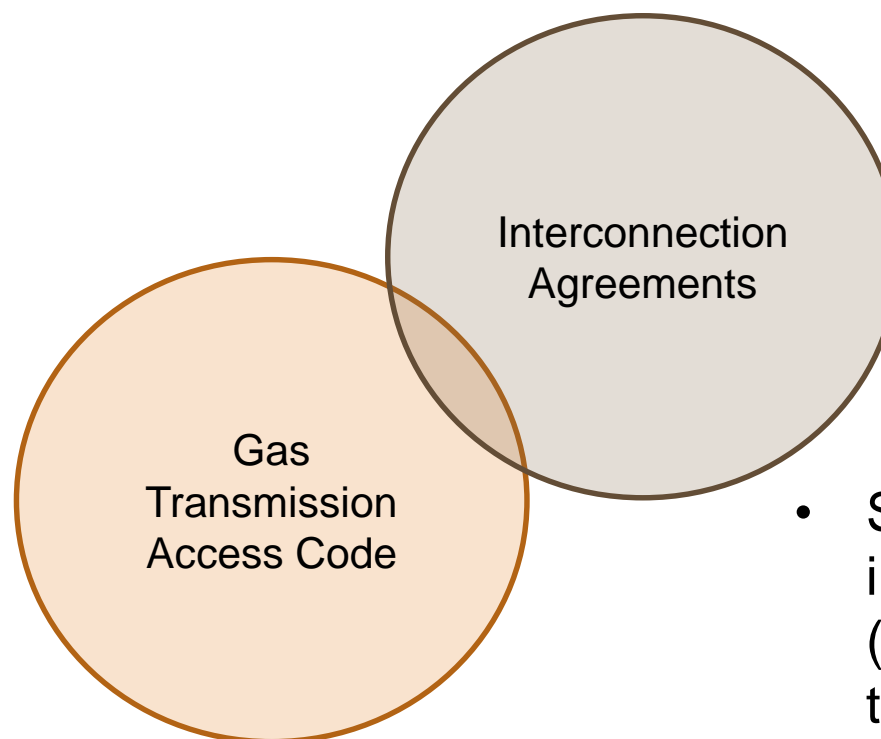


How deep?

To a level that provides clarity on how different interests are treated

Inside

- Principles of open access and non-degradation of service
- Principle of cost recovery
- Requirements for getting an ICA
- Metering requirements and equipment standards
- Gas quality rights and obligations
- Liabilities

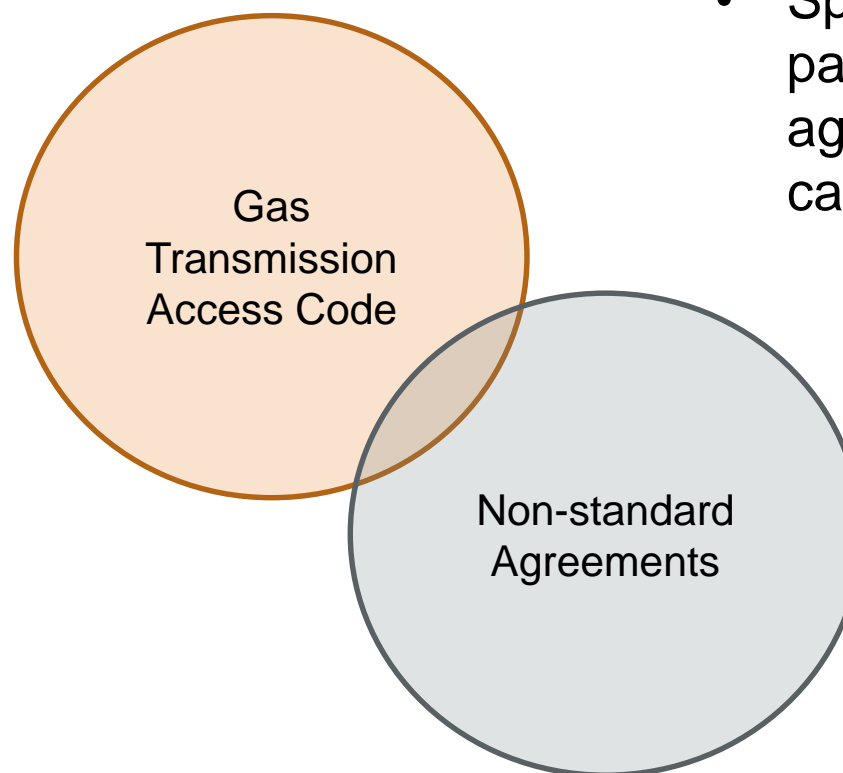


Outside

- Specifics of interconnection (size, location, timing, pressure)
- Specific technical enhancements at particular locations
- Price and payment terms

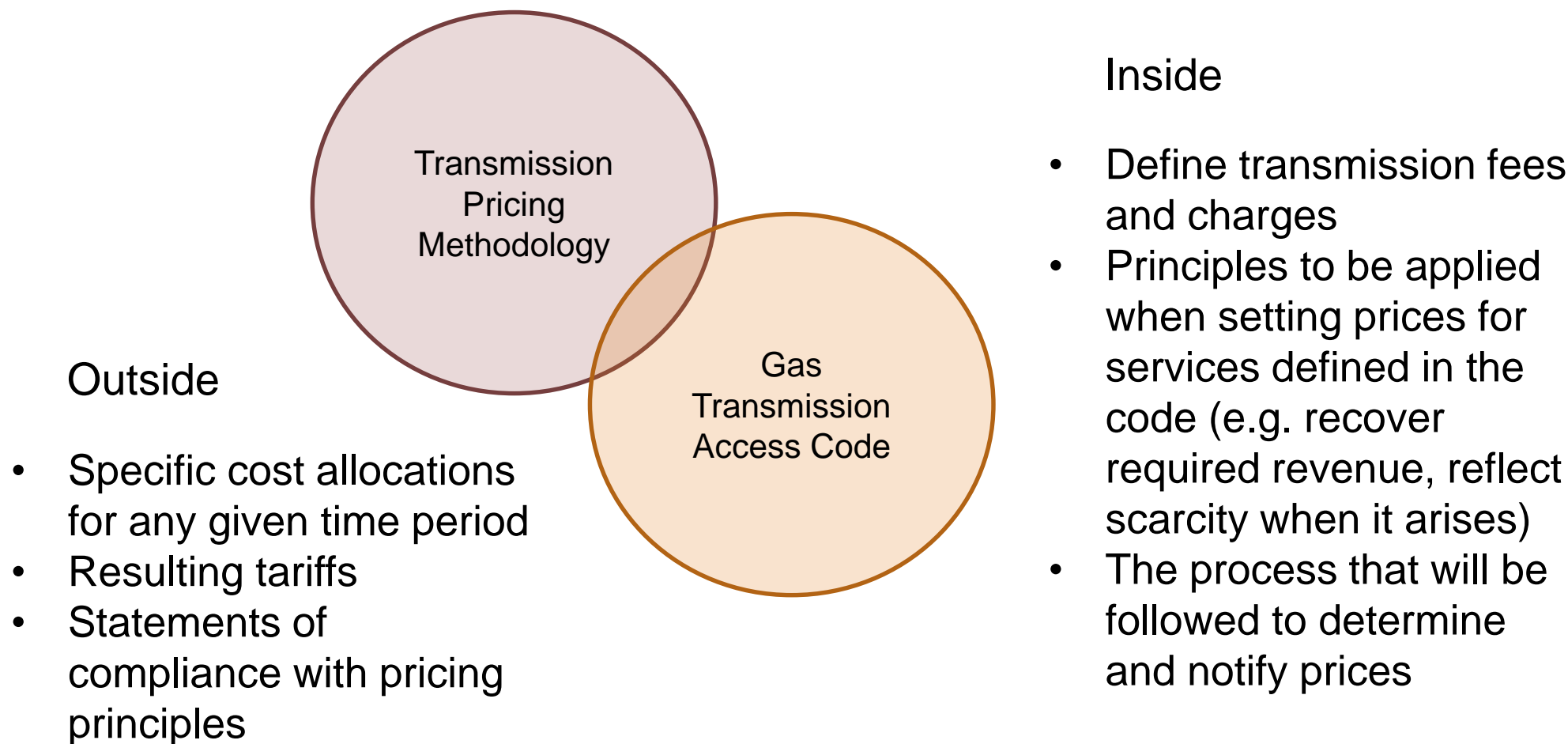
Inside

- Circumstances when non-standard agreements will be considered
- Provisions of code that can be varied in non-standard agreements
- Transparency obligations



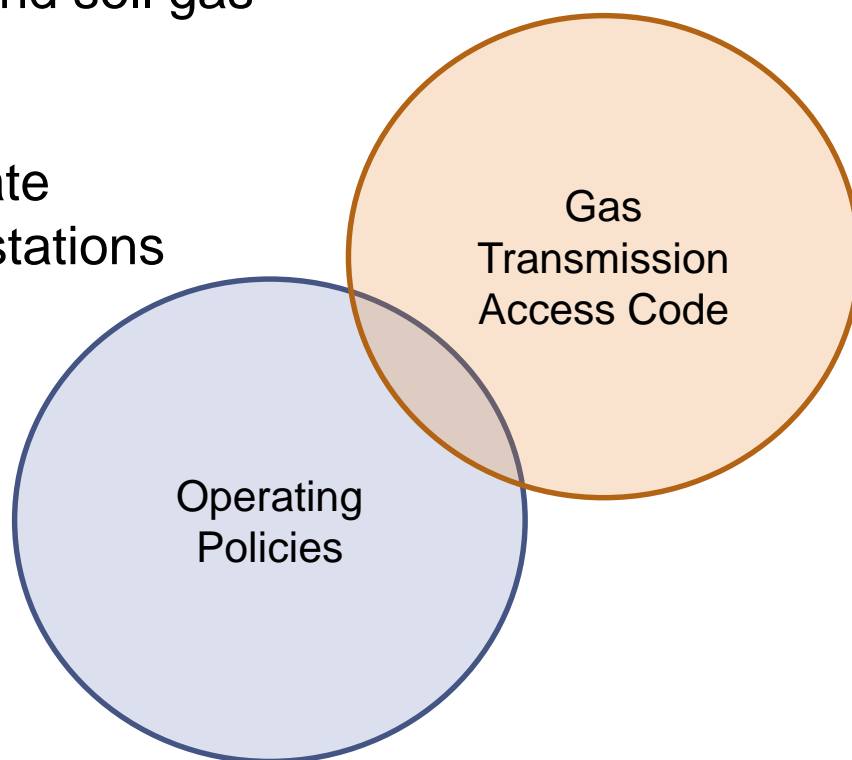
Outside

- Specific details of particular non-standard agreements (price, capacity, etc)



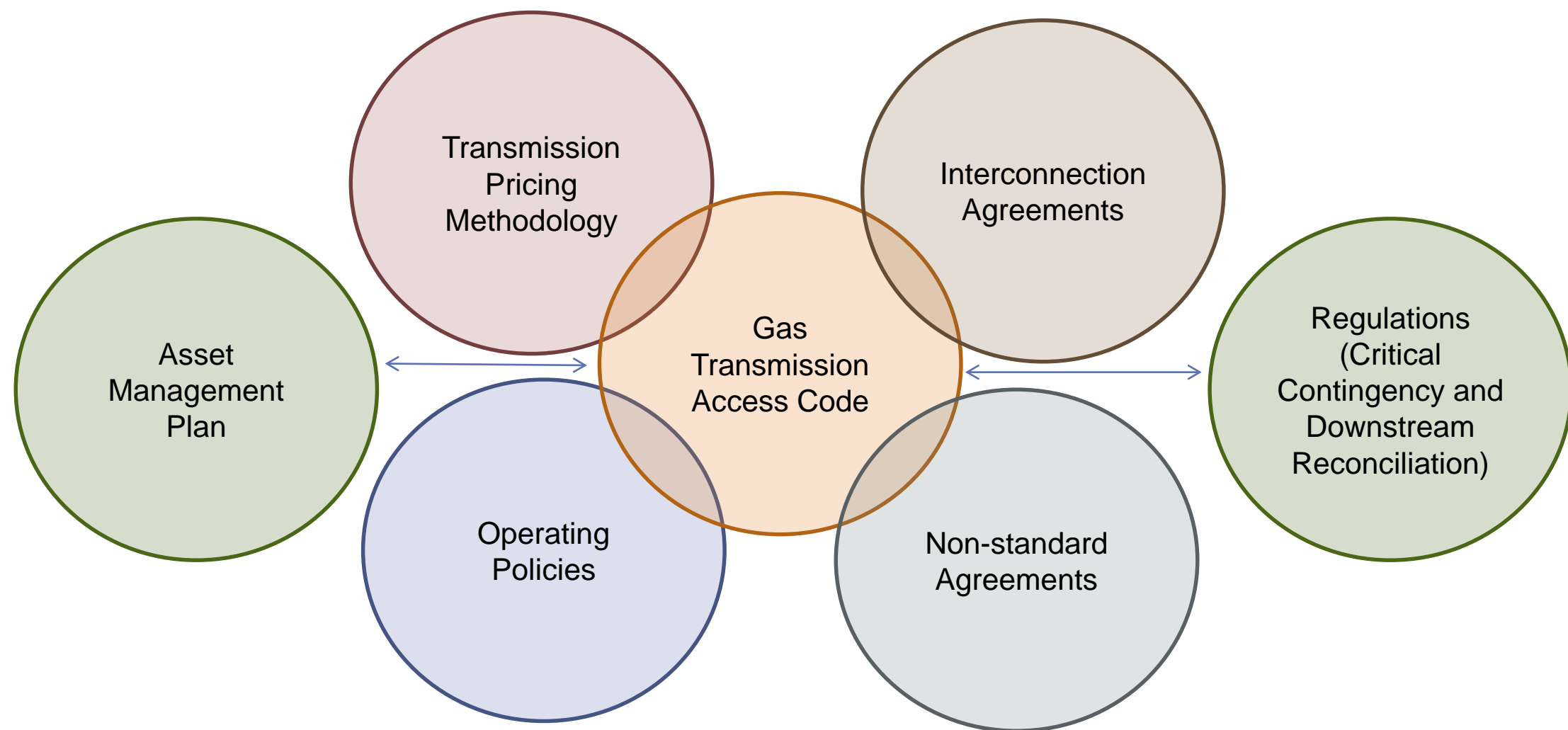
Outside

- How to buy and sell gas for line pack management
- How to operate compressor stations

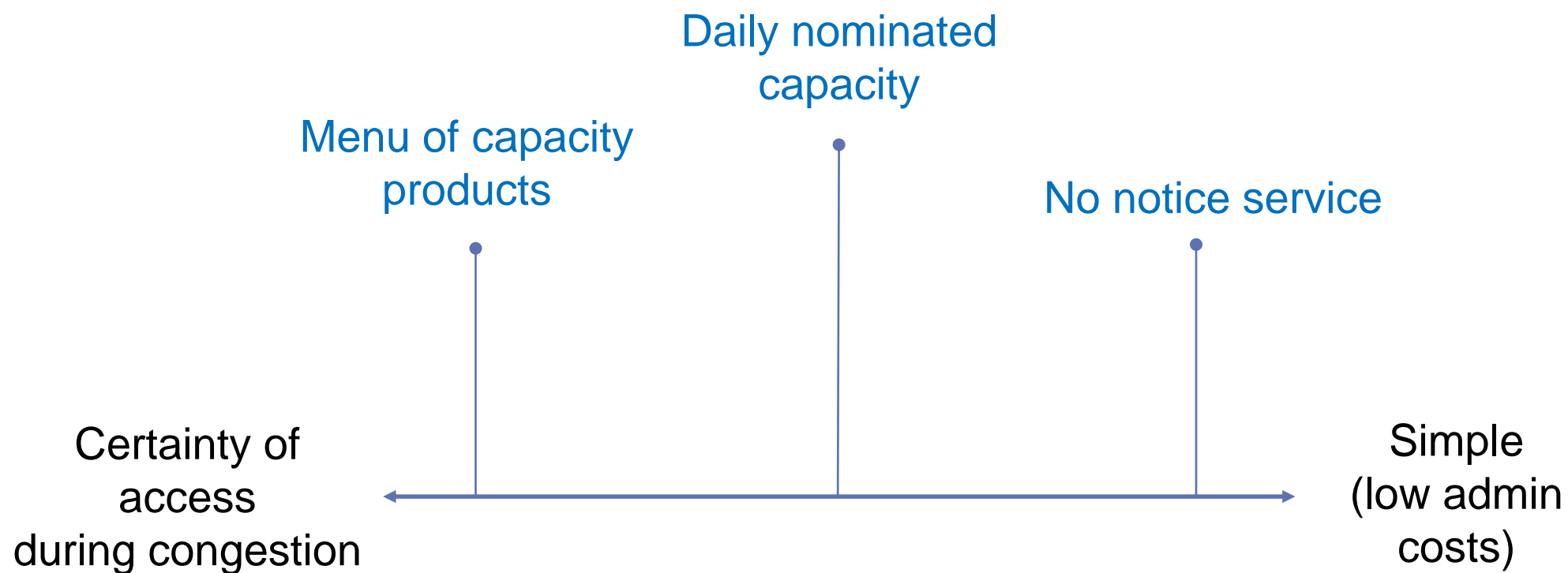


Inside

- Operational responsibilities of First Gas (e.g. line pack management)
- Principles to be applied to operational decisions (e.g. RPO obligation, primary obligation for reliability of transmission network, cost-effectiveness)
- Consultation and transparency on operating policies



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Product definition

- Fixed capacity (profiled and with term)
- Daily nominated capacity (maximum daily quantity)
- Interruptible capacity (where offered)

Geography

- Receipt and delivery points and/or zones

Scarcity management

- Menu of contracts provides priority order for managing congestion

Incentives

- Overrun charges for exceeding capacity bookings or nominations

Information requirements

- What capacity is available in different parts of the network
- What capacity is required each day

Pricing considerations

- How should relative prices between different prices be set (i.e. premium for fixed, discount for interruptible)

- Are nominations required for fixed capacity product?
 - If not, true no notice service (reserved capacity / virtual pipeline)
 - If yes, unused capacity could be released to other parties (option on capacity)
- Tradeability of capacity:
 - Is this required given ability to access capacity on a day?
 - Could have ability to trade fixed capacity
- Frequency of fixed capacity offers: annually, quarterly, monthly
- How to cope with changing demand requirements (e.g. peaking) – through operational limits, products offered, fees, etc

Product definition

- Daily capacity (maximum daily quantity)

Geography

- Receipt and delivery points and/or zones

Scarcity management

- Offer of priority rights where total daily nominations exceed available capacity between points and zones
- Curtailment of nominations where required

Incentives

- Overrun charges for exceeding nominations

Information requirements

- What capacity is required each day

Pricing considerations

- How to set daily capacity prices to recover allowable revenue with some certainty (+/- 20%)
- How to deal with any revenue from priority rights

Design choices for daily nominated capacity **Firstgas**

- Relationship with gas producers / role of OBAs:
 - Who should take responsibility for balancing – shippers or welded parties?
- Form, timing and relevance of nominations (day ahead and intra-day):
 - How should nominations be used to manage linepack?
 - How much information is needed to manage pipeline linepack?
 - Do timeframes for altering nominations intraday need to be fixed?
- Number of service points/zones
- How to cope with changing demand requirements (e.g. peaking) – through operational limits, fees, etc

- | | |
|--------------------------|--|
| Product definition | <ul style="list-style-type: none">• Ability to inject and offtake gas |
| Geography | <ul style="list-style-type: none">• Could be system as a whole, could be receipt and delivery points and/or zones |
| Scarcity management | <ul style="list-style-type: none">• Price signals• Interruptible contracts• Hierarchy of agreed operational responses |
| Incentives | <ul style="list-style-type: none">• Incentives to manage balancing position to zero |
| Information requirements | <ul style="list-style-type: none">• Daily allocations of injections and offtakes• Planned injection quantities• Planned step changes in demand |
| Pricing considerations | <ul style="list-style-type: none">• What geography should be used to set postage stamp usage charges• How should any scarcity prices be set |

- Should welded parties or shippers be the counterparties?
- How actively should the network be managed to avoid critical contingencies?
- How much and what type of information is required to ensure reliable transmission in the absence of nominations?
- How can physical congestion / events be managed and the cost recovered (e.g. through storage, interruptible user contracts)

Factors that would support different options **Firstgas**

If you believe that...	Menu of capacity products	Daily nominated capacity	No notice service
High likelihood of congestion	✓✓	✓	
Nominations are highly valuable	✓	✓✓	
We need to keep admin costs very low	✓	✓	✓✓
We should build on existing concepts	✓	✓	

What is the likelihood of congestion?

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- Aim to develop understanding of IT options, capability, cost in parallel with code development
- Arranged demos with two international providers of IT solutions
- Provide comfort that all options can be implemented through “off the shelf” solutions
- Key unknown is the level of configuration and customisation involved
- We have made no decisions about suppliers yet



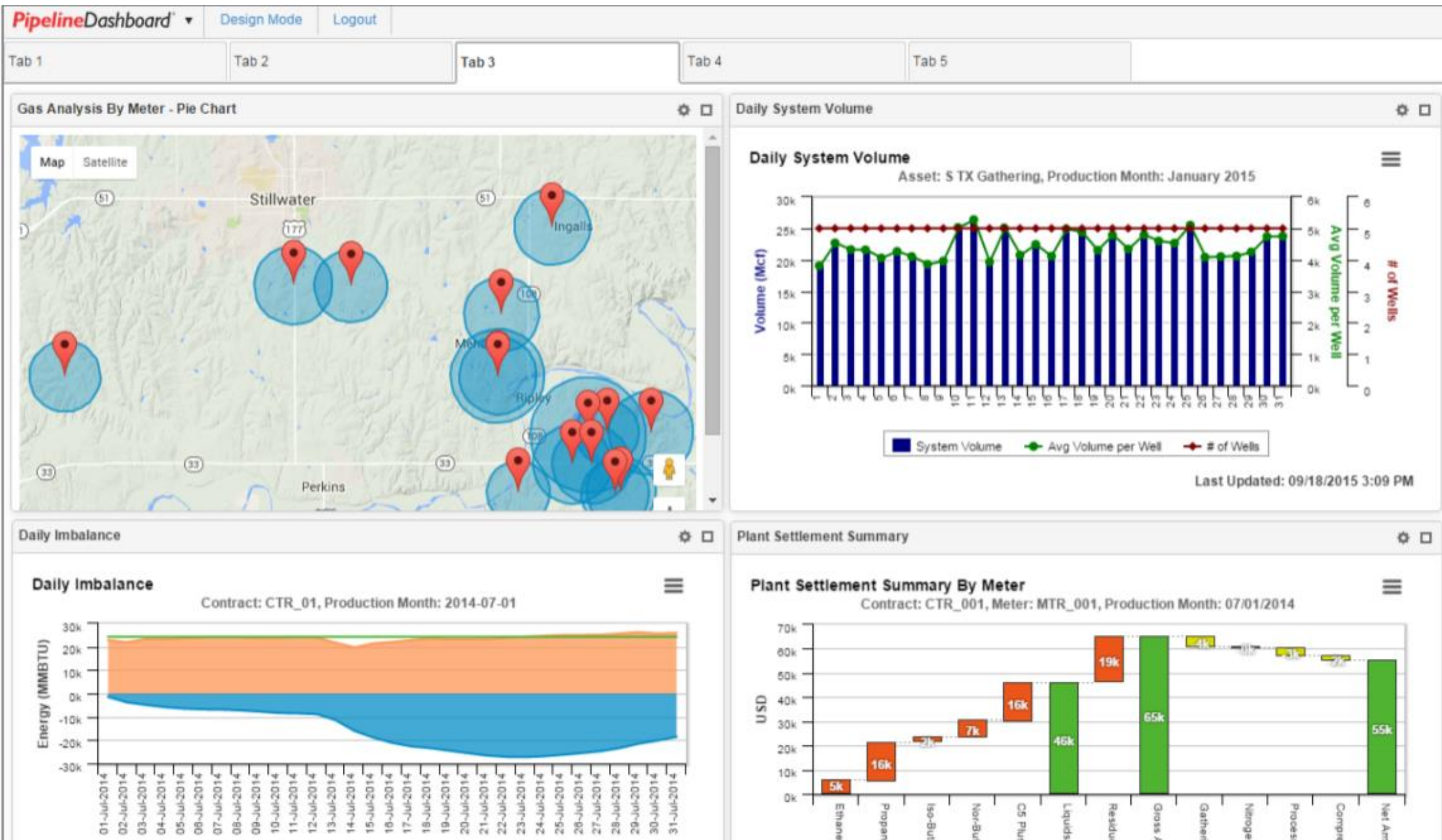
<http://www.energy-solutions.com/products/transaction-manager/>



<https://www.qbsol.com/all-solutions/pipeline-management>

ESI user dashboard: Example

Firstgas



ESI Welded Party confirmation screen: Example

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PipelineTransporter®

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INTERNATIONAL

Welcome, admin | Log Off

Home | Nominations | Allocation | Invoicing | Supervision | Reports & Views | Site Maintenance | Security | Help

Downstream Confirmations

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Quick Information ▼

Point operator Beluga Shipper C
Network Beluga Network
Pipeline Beluga Three Pipeline
Delivery Beluga LDC company
Date 10/10/2013
Unit MMSCF
NAESB Cycle 4

Point operator ▼

Point operator
Beluga Shipper C ▼

Point Selector ▼

Network

Downstream Confirmations

<input type="checkbox"/>	Contract Code	Dn Contract	Nominated	Confirmed	Scheduled
<input type="checkbox"/>	GTA-Beluga-1		15,000.00	15,000.00	15,000.00
<input type="checkbox"/>	GTA-Beluga-3		0.00	0.00	0.00
<input type="checkbox"/>	GTA-Beluga-4			0.00	
<input type="checkbox"/>	--	--	Total = 15,000.00	Total = 15,000.00	Total = 15,000.00

Update

Cancel

Upload

Browse...

Export

Copy

ESI Pre-Determined Allocation selection: Example

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INTERNATIONAL

Welcome, admin | Log Off

Home | Nominations | Allocation | Invoicing | Supervision | Reports & Views | Site Maintenance | Security | Help

PDA Configuration

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Point Selector ▼

Point

Allegro cement factory - Beluga ▼

PDA Configuration

<input type="checkbox"/>	Eff. Date	PDA Rule	
<input type="checkbox"/>	06/01/2012	OBA	Details
<input type="checkbox"/>	06/02/2012	Operator Provided	Details
<input type="checkbox"/>	06/03/2012	Percentage	Details
<input type="checkbox"/>	06/04/2012	Pro Rata	Details
<input type="checkbox"/>	06/05/2012	Ranked	Details
<input type="checkbox"/>	06/06/2012	Scheduled	Details
<input type="checkbox"/>	06/07/2012	Swing	Details
<input type="checkbox"/>	06/08/2012	Swing Pro Rata	Details

Add

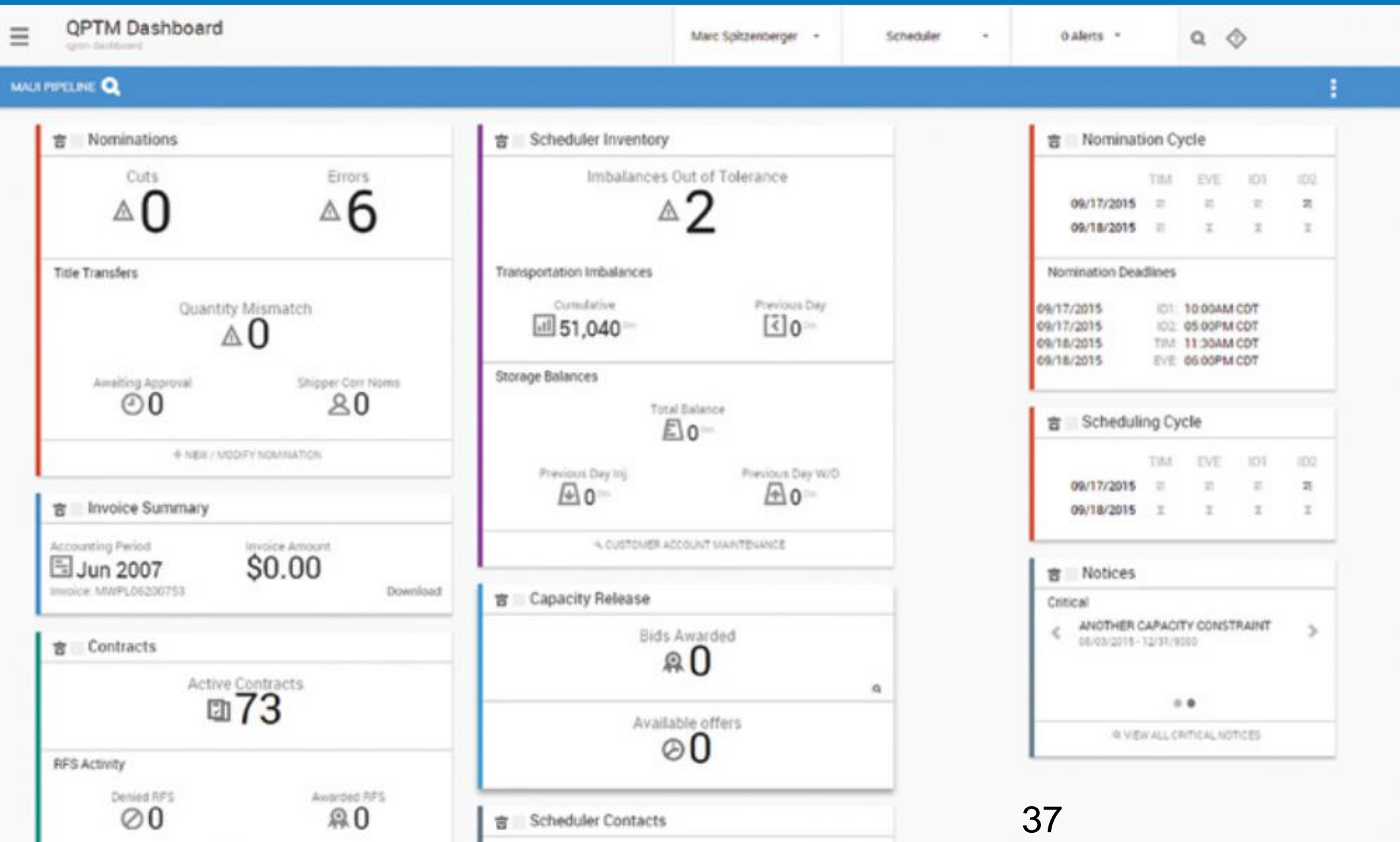
Delete

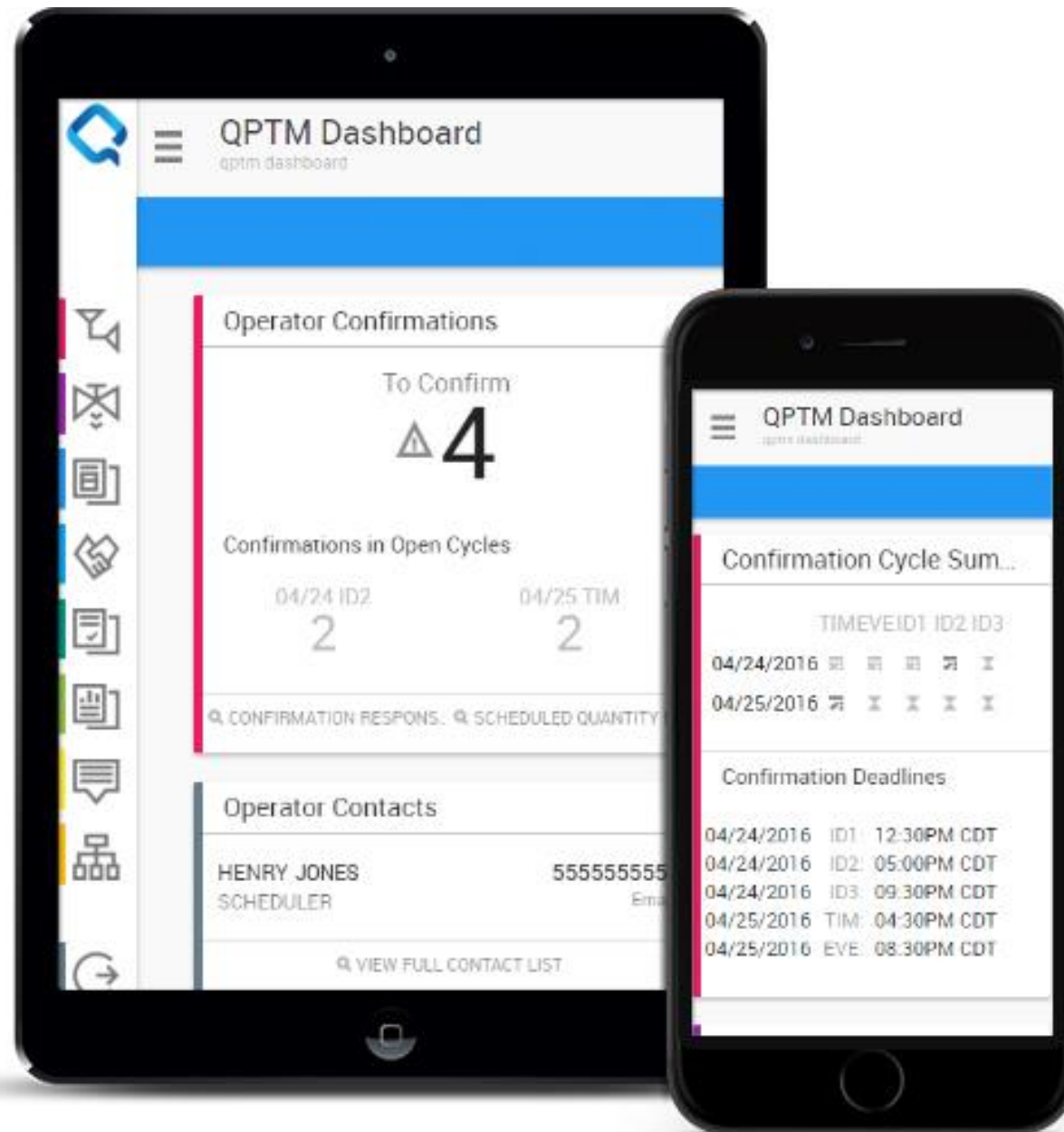
Update

Cancel

Quorum dashboard: Example

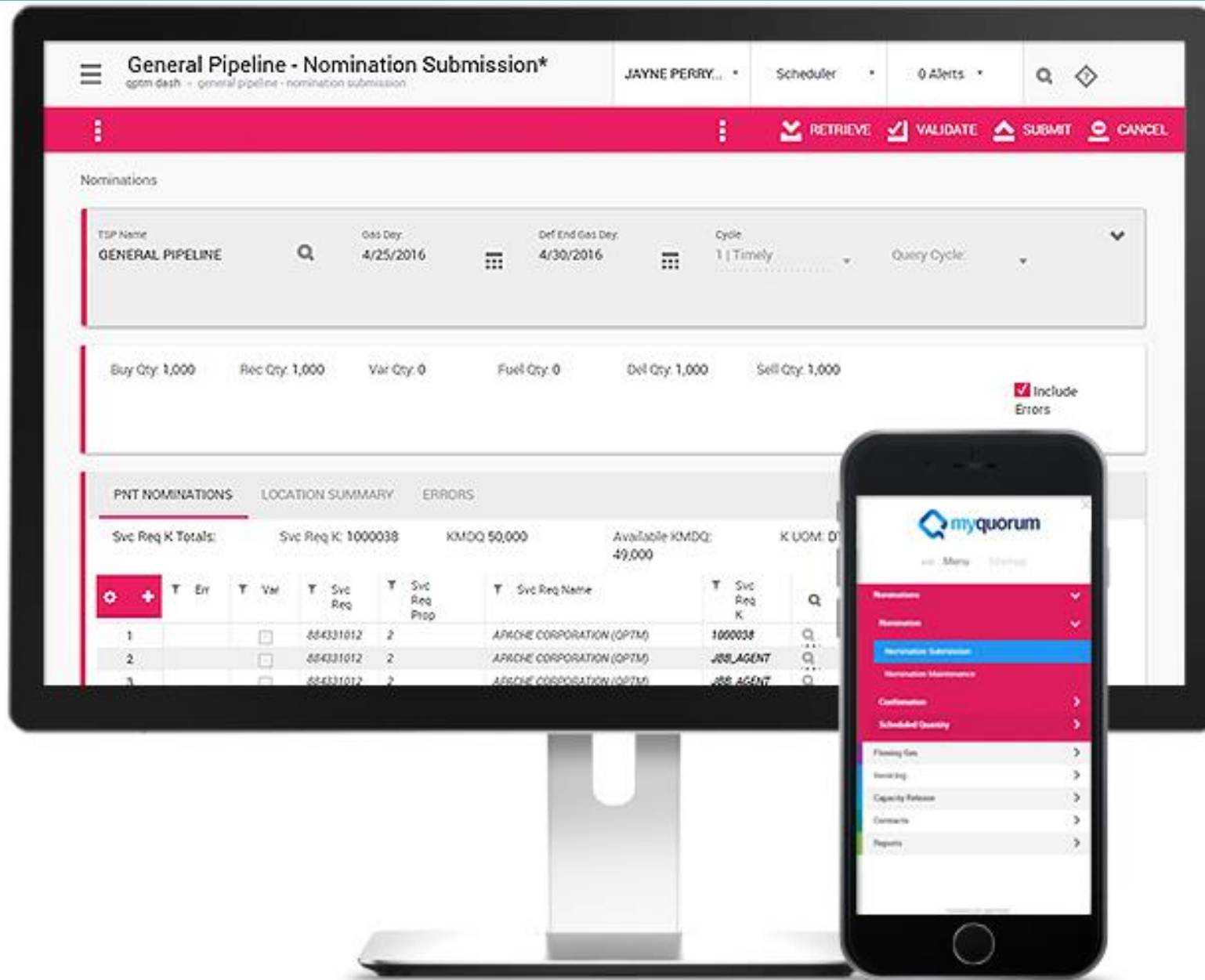
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Quorum nomination screen: Example

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- Most parties are supportive of First Gas having the ability to negotiate non-standard agreements
- Needs to be done in a transparent way that protects the interests of all system users
- Honour all existing non-standard agreements under the VTC
- Tightly prescribe circumstances for future non-standard agreements to:
 - Uneconomic bypass
 - Incremental new load that is uneconomic at standard prices
- Circumstances will be influenced by range of standard products
- Publish the terms of non-standard agreements (including price) on our website

- All options will involve First Gas using best endeavours to manage system line pack with responsible operational limits
- Value in having an incentive for parties to balance their positions
 - How the incentive is framed will depend on what parties are signatories to the new code and whether OBAs are in place
- Incentives to balance on a day seem to work
- Opportunity to reframe balancing away from “breach” of obligation to be a service that is provided by the pipeline (“park and loan”)
- Value in separating variance charges (transmission fees) from balancing charges (gas inventory management)

- Retain existing “core” gas quality principles and requirements
- Improve the transparency and availability of gas quality related information
- Explore the “lack of contractual nexus” issue for liability claims resulting from a gas quality issue as well as potential solutions
- Previously identified “process” based improvements to be progressed independently
- Gas quality will have components that need to be captured in the new code, ICAs with interconnected parties (depending on scope of new code), as well as aspects that are best addressed through processes or policies recorded in subsidiary instruments

- We see an opportunity to improve on the change processes in the current codes
- Interplay with earlier discussion of what is inside and outside the code
 - The more that sits inside the code, the more responsive the code change process needs to be
- May need two levels of governance:
 - A top tier where changes can only be made after extended consultation with shippers and end-users, with independent oversight or approval
 - A lower tier where changes can be made more frequently, but still subject to consultation and some (lighter) form of oversight

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- Paper to be released 28 November
- Submissions due 23 December
- Christmas / NY break!
- Summary of submissions end January 2017
- Decisions on how best to run process for detailed design
 - Likely to be divided into parts to address issues in sequence
 - E.g. use of “working groups” or engagement with interested shippers / end users?
- Remain focused on concluding code design and drafting in 2017 for a 1 October 2018 “go live”

Questions?