Performance Assurance Framework Document for the (Gas) Energy Settlement Performance Assurance Scheme

Document 3

Risk Register

The following is the Risk Register provided under the Performance Assurance Framework Document for the (Gas) Energy Settlement Performance Assurance Scheme.

Version History

Version	Date	Reason for new version
1.0	May 2016	Final version from Workgroup Report 0520A
2.0	Jan 2017	Draft for PAC Review
3.0	Feb 2017	Amended for PAC Review

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1. **Introduction**

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This document sets out the supporting example templates and register.

A risk can be defined as an uncertain event or set of events that, should it occur, will have an effect on the achievement of objectives. For Performance Assurance a risk is the probability that an event or action may adversely affect the performance and gas settlement arrangements. To highlight a risk for investigation is to ask the question *"what may be going wrong and what can be done about it?"*

Risk Management provides a framework within which business-critical risks can be identified, assessed, managed and reported in a visible, structured, consistent and continuous manner. Effective Risk Management will help to create and focus management action plans to mitigate against risk.

Below is an example of a risk process for discussion and development within the PAC.

2. Identification of Risk

Potential risks can be identified by a UNC party or statutory body and submitted to the PAFA. To do this a standard template is required. A Risk Template is shown in Appendix 1. A guidelines document for completion of the Risk Template is available in Appendix 2 and an example of a completed Template is available in Appendix 3.

The Risk Template should be populated with all the information necessary to aid the PAFA to register the risk and then provide this to the PAC for the next stage of the process. Should there be insufficient information to document the risk the PAFA will need to liaise with the Risk Originator to obtain the relevant information.

During this stage the PAFA will conduct an initial validation of the risk including its scoring to ensure the risk needs to be added to the Risk Register, for example ensuring that the risk identified is not a duplication of an existing risk on the Risk Register.

Once the necessary information is captured the PAFA will translate the risk onto the Risk Register.

3. Risk Register

The PAFA will translate the risk onto the Risk Register. A copy of the Risk Register is available in Appendix 4 and a definition of the components of the Risk Register can be found in Appendix 5. An example of a completed Risk Register is available in Appendix 6. All risks will be highlighted to the PAC to clarify and quantify the risk. The risk rating is scored based on the financial impacts, community impacts of the risk and the likelihood of the risk occurring. The PAC is responsible for assessing and agreeing on the score.

The risk scoring matrix looks at where this risk score is currently, what the worst case scenario could be should the risk not be addressed, and the target for the risk score following the expected mitigation actions.

Risks will be given a status based on the score (active/monitoring/closed). Where the risk is deemed to have little or no impacts it will be closed and the Risk Originator will be informed, along with a suitable explanation. Risks that are identified as having a low score with controls in place may require monitoring and therefore may remain open with a status of 'monitoring'. As and when required, the PAC will update the risk score and determine the next steps, e.g. to escalate or close the risk.

The PAFA is responsible for administering and maintaining the Risk Register. The PAFA will update the Risk Register based on the outcomes of the PAC risk discussions, actions and controls, and where necessary will close the risks.

The Risk Register is expected to be published in a location as advised by the PAC.

4. **Risk Actions and Controls**

For every potential cause of a risk, a control needs to be identified. Where controls do not exist an action will be created to reduce the likelihood of occurrence of the risk. The PAC will decide on the course of action to be taken for the identified risk(s) and delegate these accordingly. All actions will have an assigned owner who is accountable for them with a defined target date. The PAFA will support the PAC to monitor and update the actions within the Risk Register and will therefore liaise with all parties and owners of actions. The PAFA will update the actions either monthly for high risks or quarterly for low risks and inform the PAC. Any actions incomplete will be subject to regular scrutiny from the PAC.

Risks are also deemed to have a control opinion. This is based on a three point scale of not effective, partially effective and effective predicated on the levels of control in place. As actions are implemented and levels of control established the control opinion should reflect this. Based on the control level, the risk score calculated fro the throughput risk multiplied by the probability, is then further multiplied by a control factor: x 1 for Not Effective, x 0.8 for Partially Effective and 0.6 for Effective. This then provides a total 'net risk' score.

5. **Risk Progress Report**

A risk review date is provided on the Risk Register. For high scoring risks, this will be monthly; all other risks will be reviewed quarterly.

All risks are submitted to the PAC and will be subject to a Risk Progress Report. The Risk Progress Report is to provide an update of planned actions and risk management activities to help shape the target risk score and action progress. The PAFA will provide the Risk Progress Report to the PAC as required.

6. **Closing a Risk**

Risks are closed based on the result of the actions and the controls put in place. The Risk Progress Report may highlight that controls are in place and subsequently the PAC may amend a risk score. Where risk scores have reduced or have met the target and are no longer deemed to be a risk to gas settlement performance the PAC may choose to close the risk. The PAFA will update the Risk Register accordingly and notify the Risk Originator of the actions completed and the outcome of the risk they raised

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Appendix 1 – Performance Assurance: Risk Template Please complete the template with as much information as possible that to aid the registration and initial investigation of the proposed risk. All fields are mandatory unless otherwise specified. Please refer to the guidance document.

Date		Raised by (include Contact Details)	
There is a risk that… (Risk Description)			
Because of… (Cause)			
Leading to… (consequence)			

Risk Scores		Throughput (1-5)	Probability (1-5)	Control (Not Effective, Partially Effective, Effective)	Total (Net Risk)
	Current				
	Target				
	Inherent				

Current controls identified - explanation		Any additional information/ supporting information *(optional)*	

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Appendix 2 - Guidance for populating the Risk Template

The Risk Template is designed to provide sufficient information for the PAFA to update the Risk Register and to facilitate discussions within the PAC therefore please update to the best of your knowledge.

The following fields are mandatory and should be populated. Any fields that have not been populated will result in a delay to the updating of the Risk Register.

Date: Date the risk is raised.

Raised by: Your details, including a method for communication should the PAFA need additional information and for on-going communication regarding the progress of your risk.

There is a risk that… A description of the source of the risk, i.e. the event or situation that gives rise to the risk. A succinct sentence of what the risk is. For example, "*there is a risk that formulae year AQ is not being calculated for all Supply points*".

Because of… Identify the cause of the risk, what could pose a risk. For example, "*because reads are not being submitted by 10 Shipper organisations*".

Leading to … The consequence of the risk should it occur. For example, "*allocation of gas is not accurate and incoming Shippers may be burdened with an incorrect AQ when there is a transfer of ownership*".

Risk Scores – Score the risk based on:

- Impact: Throughput
- Likelihood of occurrence.

The matrix (below) represents the risk ratings:

Rating	Financial Impact £m (annual) Throughput	Likelihood
1	0 – 50 GWh	Description – Remote Probability – <10% chance
2	50 – 250 GWh	Description – Less Likely Probability – >10% and < 40% chance
3	250 – 500 GWh	Description – Equally unlikely as likely Probability – >40% and < 60% chance
4	500 – 1,000 GWh	Description – More likely Probability – >60% and < 90% chance
5	> 1,000 GWh	Description – Almost certain Probability – >90% chance

Scores - The score is calculated by taking a score from each column based on the risk for each category. An example of this:

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If a risk was identified that posed a financial risk of 100 GWh, and was deemed 50% likely to occur, the score would be:

Impact (throughput) x Likelihood = 2 x 3 = 6

Rating	Financial £m (annual)	Likelihood
1	0 - 50 GWh	Description – Remote Probability – <10% chance
2	50- 250 GWh	Description – Less Likely Probability – >10% and < 40% chance
3	250 – 500 GWh	Description – Equally unlikely as likely Probability – >40% and < 60% chance
4	500 – 1,000 GWh	Description – More likely Probability – >60% and < 90% chance
5	>1,000 GWh	Description – Almost certain Probability – >90% chance

The score is calculated across 3 separate categories:

- Current risk - The current position of the risk based on the analysis you have undertaken.
- Target risk - Where you would like the risk to be in the future once controls have been put in place. For a risk to be minimised you would anticipate a control opinion of green even if the score is not zero.
- Inherent risk – The worst case scenario should the risk occur.

All scores are subject to review and amendment by the Performance Assurance Committee.

Any current controls identified – Any identified controls that already exist to mitigate against the risk.

Any additional information/supporting information (optional) - Additional information that can be presented to the PAC to aid discussions and form actions; this may include example scenarios of the risk.

Appendix 3 – Example Risk Template

Performance Assurance: Risk Template

Please complete the template with as much information as possible that to aid the registration and initial investigation of the proposed risk. All fields are mandatory unless otherwise specified. Please refer to the guidance document.

Date	20/04/15	Raised by (include Contact Details)	Rachel Hinsley, Service Development Consultant
			Address - Xoserve Limited, Telephone - (0121) 623 2854?

There is a risk that… (Risk Description)	Meter Read performance is having a detrimental impact on rolling AQ

Because of… (Cause)	Meter Read submissions are not as frequent as they should be for class 4 sites. 5 Shippers have not hit any of the UNC targets for their portfolios.

Leading to… (consequence)	Where no reading is submitted the AQ cannot be updated therefore there is a risk to allocation and settlement

Risk Scores		Throughput (1-5)	Probability (1-5)	Control (Not Effective, Partially Effective, Effective)	Total
	Current	3	4	Not Effective (x 1)	12
	Target	2	1	Effective (x 0.6)	1.2
	Inherent	5	5	Partially Effective (x 0.8)	20

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Appendix 4 – Risk Register

			Risk number
Any current controls identified	Targets are set to mitigate against this risk: Monthly MRF: 90% per calendar monthSSP Annual: 70% in 12 month periodLSP Annual: 90% in 12 month period The PAC is already reporting on this but there needs to be an incentive linked to the performance to encourage the Shipping community to improve performance.	Any additional information/ supporting information *(optional)*	Please see the 'MRF' report 2.2

Risk Number:		**Risk Description:** There is a risk that…….					
Date:		**Raised by:**		**Risk Status:**		**Risk Financial Estimate**	
Risk Scores			**Throughput**	**Probability**	**Control**	**TOTAL** **(Net Risk)**	**Risk Review Date**
		Current					
		Target					
		Inherent					
Associated Risk:		**Category:**					

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Potential Causes of the Risk	Potential Consequences of the Risk Event Occurring	Controls	Actions	Owner and Target Completion Date

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Appendix 5 - Risk Register components

- **Risk Number** – unique Risk Number for identification
- **Risk Description** – a concise definition of what the risk is (not to be confused with what the risk consequence may be)
- **Date** – the date the issue is raised
- **Raised by** – the Originator of the risk to ensure they can be informed of progress
- **Risk status** – active/monitoring/closed
- **Control opinion** – this is based on the controls in place – categorised with a scale of Not Effective, Partially Effective and Effective based on the matrix (below):

Not Effective	Key controls have not been established or are deemed to be ineffective. Action plans to rectify the fundamental weakness have still to be fully identified and agreed.
Partially Effective	Key controls are in place but have either not been subject to suitable assurance activity or testing reveals that some control improvements, not deemed to be fundamental, are required.
Effective	Key controls are in place, are tested periodically as appropriate and are deemed satisfactory. This testing includes independent challenge where the risk is deemed significant (e.g. from Internal Audit or another independent assurance provider).

- **Risk Scores**:
    - Throughput Risk
    - Likelihood of occurrence.

The matrix (below) represents the risk ratings:

RISK RATINGS			
Rating	Financial £m (annual)		Likelihood
1	0 – 50 GWh		Description – Remote Probability – <10% chance
2	50 - 250		Description – Less Likely Probability – >10% and < 40% chance
3	250 - 500		Description – Equally unlikely as likely Probability – >40% and < 60% chance
4	500 – 1,000		Description – More likely Probability – >60% and < 90% chance
5	> 1,000		Description – Almost certain Probability – >90% chance

Scores – Based on the throughput impact should the risk occur x the probability of occurrence:

- Any score above [100] requires action with frequent monitoring and monthly reporting to the PAC.
- Any score between [6] and [100] will be actioned and monitored but will only be reported into the PAC on a quarterly basis.
- Scores below [6] – risk will be closed.

The score is calculated across 3 separate categories:

- Current risk - The current position of the risk based on analysis
- Target risk - Where the PAC would like the risk to be in the future once controls have been put in place
- Inherent risk – The worst case scenario should the risk occur.

- **Risk Review Date** – A review date needs to be supplied for reviewing the risk.
- **Associated Risk** – If this links to any other risk(s) within the Risk Register this will list the linked Risk number(s).
- **Risk Category** – Proposal to categorise risks.
- **Potential causes of the Risk** – Identification of all the causes that may be creating the risk.
- **Potential Consequences of the Risk Event Occurring –** Detailing the consequences should the risk occur.
- **Controls –** For every potential cause of a risk a control needs to be identified to mitigate against the risk. Where there is no control an action will be created.
- **Actions –** The actions are identified to reduce the risk of occurrence based on controls identified. The actions are specific and have an identified owner and target date of completion. All actions are required to be reviewed and updated quarterly as a minimum. The result of a completed action is that a control has been implemented which in turn will reduce the risk score and may influence the risk status.
- **Owner –** Identification of an owner to complete the action. In some scenarios this may entail all industry parties; in other scenarios this may be one organisation or may be the PAFA.

Appendix 6 – Risk Register

<table>
<tr><td colspan="6"></td><td colspan="2" align="center">**Risk Number 2**</td></tr>
<tr><td rowspan="2">**Risk Number:**</td><td rowspan="2">2</td><td colspan="6">**Risk Description: Incomplete Meter Read Submissions**</td></tr>
<tr><td colspan="6">There is a risk that……. Meter Read performance is having a detrimental impact on rolling AQ</td></tr>
<tr><td>**Date:**</td><td>21/04/15</td><td>**Raised by:**</td><td>Rachel Hinsley</td><td>**Risk Status:**</td><td>Active</td><td>**Risk Financial Estimate**</td><td>**£3 million**</td></tr>
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<table>
<tr><td rowspan="4">**Risk Scores**</td><td></td><td></td><td>**Throughput**</td><td>**Probability**</td><td>**Control**</td><td>**Net Risk**</td><td rowspan="4">**Risk Review Date:**

Initial discussions to be held at the PAC on 5th May and scores to be agreed</td></tr>
<tr><td>**Current**</td><td></td><td>3</td><td>4</td><td>Not Effective (x 1)</td><td>12</td></tr>
<tr><td>**Target**</td><td></td><td>2</td><td>1</td><td>Effective (x 0.6)</td><td>1.2</td></tr>
<tr><td>**Inherent**</td><td></td><td>5</td><td>5</td><td>Partially Effective (x 0.8)</td><td>20</td></tr>
</table>

<table>
<tr><td>**Associated Risk:**</td><td>NA</td><td>**Category:**</td><td>Settlement</td></tr>
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<table>
<tr><td>**Potential Causes of the Risk**</td><td>**Potential Consequences of the Risk Event Occurring**</td><td>**Controls**</td><td>**Actions**</td><td>**Owner and Target Completion Date**</td></tr>
<tr><td>Meter Read submissions are not as frequent as they should be for class 4 sites. 5 Shippers have</td><td>Where no reading is submitted the AQ cannot be updated therefore there is a risk to allocation and</td><td>Targets are set to mitigate against this risk:

Monthly MRF: 90% per calendar month

SSP Annual: 70% in 12 month period</td><td>To be agreed at meeting 05/05/15</td><td>To be agreed at meeting 05/05/15</td></tr>
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not hit any of the UNC targets for their portfolios.	settlement	LSP Annual: 90% in 12 month period The PAC is already reporting on this but there needs to be an incentive linked to the performance to encourage the Shipping community to improve performance.		

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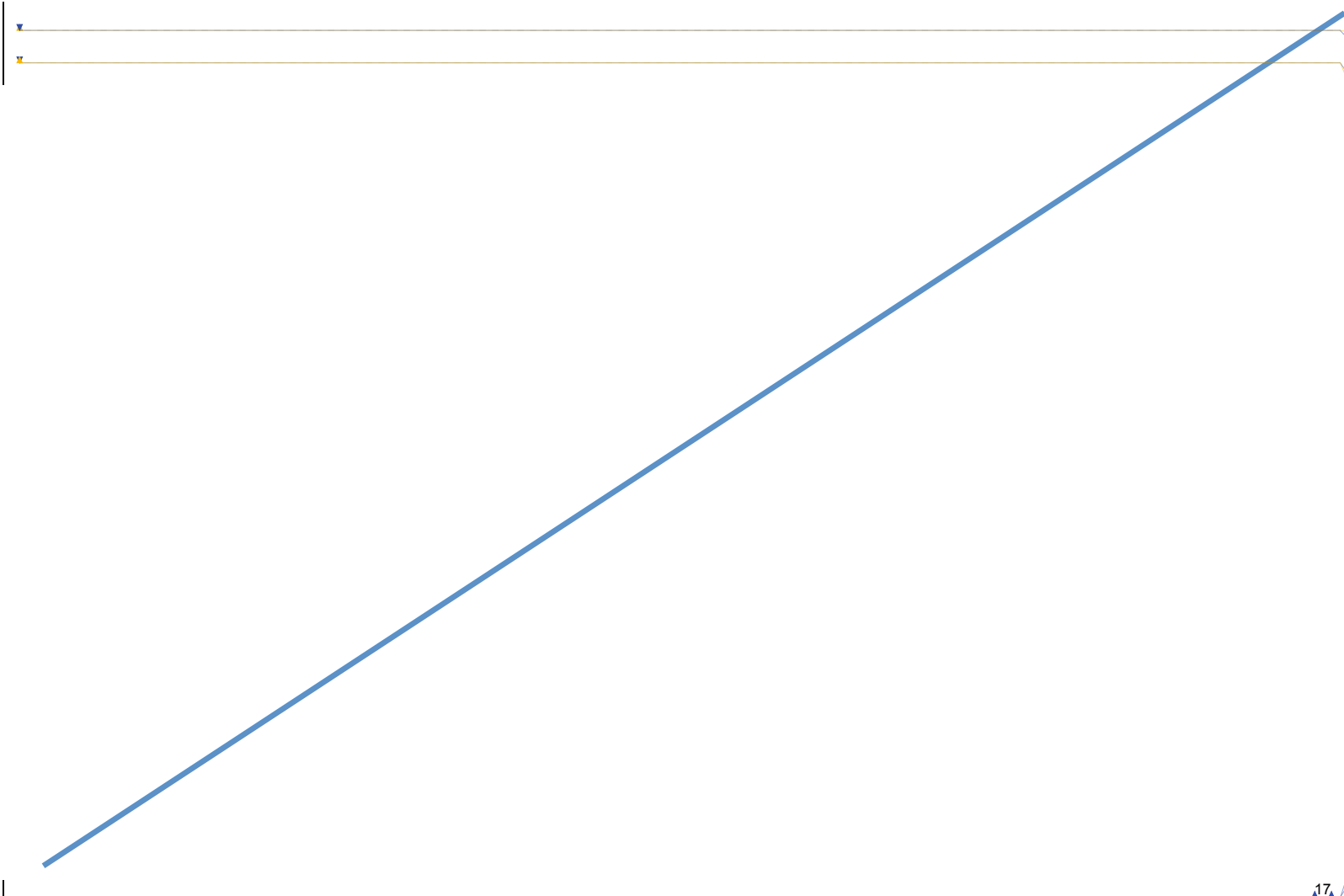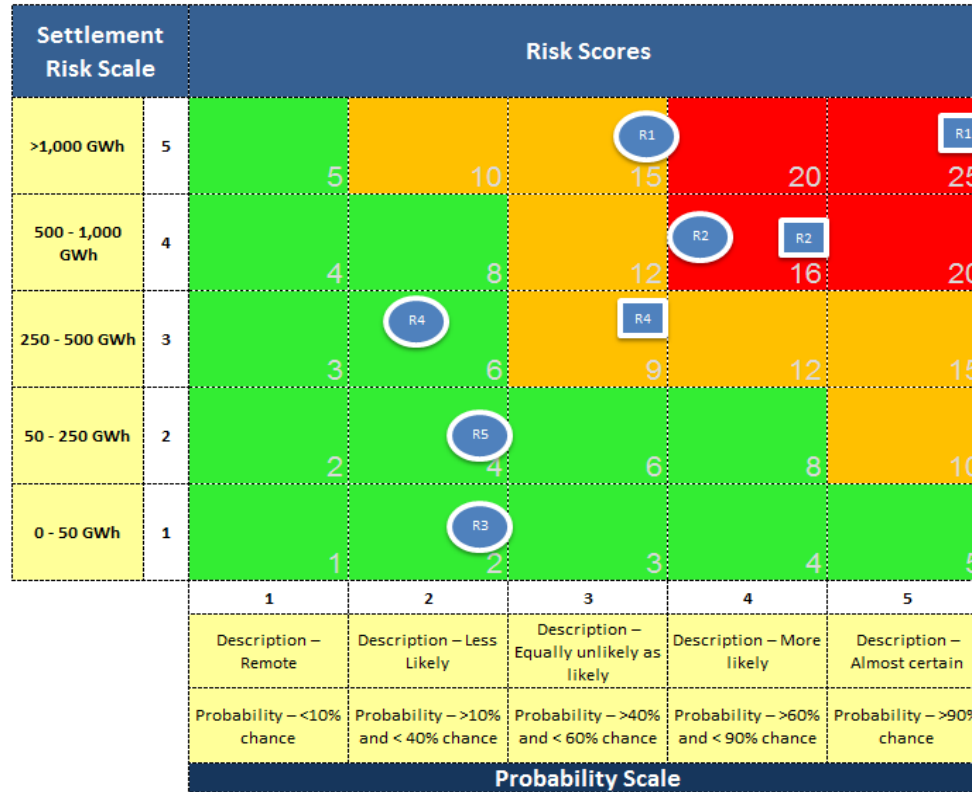
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Example Risks	Settlement (GWh)	Probability	Control	Net risk	Gross Risk
Risk 1	1,500	>90%	Effective	25	15
Risk 2	750	75%	Partially Effective	16	13
Risk 3	35	Less Likely	Not Effective	2	2
Risk 4	450	50%	Effective	9	5
Risk 5	75	Less Likely	Not Effective	4	4

Risk Map

Control Factor

Effective	Partially Effective	Not Effective
0.6	0.8	1

Settlement Risk Scale		Risk Scores				
>1,000 GWh	5	5	10	15	20	25
500 - 1,000 GWh	4	4	8	12	16	20
250 - 500 GWh	3	3	6	9	12	15
50 - 250 GWh	2	2	4	6	8	10
0 - 50 GWh	1	1	2	3	4	5
		1	2	3	4	5
		Description – Remote	Description – Less Likely	Description – Equally unlikely as likely	Description – More likely	Description – Almost certain
		Probability – <10% chance	Probability – >10% and < 40% chance	Probability – >40% and < 60% chance	Probability – >60% and < 90% chance	Probability – >90% chance
		Probability Scale				

Appendix 7 – Example Risk Scoring

Appendix 8 – Example Visual Globe Map

Appendix 7 – Example Risk Scoring

Risk can be scored in different ways. The example scenario has rated scores based on financial impact, community impact and likelihood (probability) of occurrence. The rating categories need to be discussed and defined based on recommendations from the PAC. Alongside the options for risk ratings the PAC will also need to decide the method it wishes to adopt for scoring. The scoring needs to take into account the brackets for scoring a risk as high or low and the outcome of a risk score affecting the frequency with which a risk needs to be presented to the PAC.

For example:

Any score above [100] requires action with frequent monitoring and monthly reporting to the PAC.
Any score between [6] and [100] will be actioned and monitored but will only be reported into the PAC on a quarterly basis.
Scores below [6] – risk will be closed

Below are given two examples of different ways the scoring system could be used by the PAC:

Example 1:

RISK RATINGS			
Rating	**Financial £m (annual)**	**Community**	**Likelihood**
1	[<£1million]	[Risk to one Shipper organisation]	Description – Remote Probability – <10% chance
2	[£1m – £25m]	[Risk to whole Shipper community]	Description – Less Likely Probability – >10% and < 40% chance
3	[£25m – £50m]	[Risk to Shipper Community and one Network]	Description – Equally unlikely as likely Probability – >40% and < 60% chance
4	[£50m – £75m]	[Risk to Shipper Community and	Description – More likely

		all Networks]	Probability – >60% and < 90% chance
5	[>£75m]	[Risk to Shipper Community, Networks, all parties and potential risk to End Consumers]	Description – Almost certain Probability – >90% chance

If a risk was identified that posed a financial risk of £5million, affected all Shippers and was deemed 50% likely to occur, the score could be:

Financial impact x Community Impact x Likelihood = 2 x 2 x 3 = 12 or;
Financial impact + Community Impact + Likelihood = 2 + 2 + 3 = 7

Example 2:

Alternatively, a simpler option could be formed where the impact is grouped together

RISK RATINGS		
Rating	**Cost** **£m (annual)**	**Impact**
1	[<£1million]	[Risk to one Shipper organisation] Probability – <10% chance
2	[£1m – £25m]	[Risk to whole Shipper community] Probability – >10% and < 40% chance
3	[£25m – £50m]	[Risk to Shipper Community and one Network] Probability – >40% and < 60% chance
4	[£50m – £75m]	[Risk to Shipper Community and all Networks] Probability – >60% and < 90% chance
5	[>£75m]	[Risk to Shipper Community, Networks, all parties and potential risk to End Consumers] Probability – >90% chance

If a risk was identified that posed a financial risk of £5million, affected all Shippers and was deemed 50% likely to occur the score could be:

Cost x Impact = 2 x 3 = 6 or;
Cost + Impact = 2 + 3 = 5