



CCS Financial Securities Review

Wednesday 30th June 2010

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Agenda



- Background to CCSA discussion
- Risks and Liabilities to be addressed
- Financial instruments available
- EU Guidelines

Disclaimer



- The material in this presentation summarises discussion amongst members of the CCSA
- The CCSA has not formally adopted an agreed position on financial securities – so the information presented here should be regarded as “work in progress”

Financial Securities Review

Some background



- Discussions in Q4 2009
 - ◆ CCSA Risk and Regulatory Workgroup chairmen met with UK DECC
 - ◆ CCSA Risk Workgroup chairman met with Scott Brockett at EU
- CCSA objective
 - ◆ Inform and influence EU and DECC regulation and guidelines
- Discussion paper drafted
 - ◆ November 2009 - May 2010 - extensive debate and comments incorporated
 - ◆ Too late to meet original purpose
 - ◆ Workshop held with UK DECC June 2010

Risks and Liabilities to be addressed (1/2)

Normal operating costs



- Routine operational costs
 - ◆ health and safety of staff on sites,
 - ◆ local impact of operations
 - ◆ normal employer liabilities
 - ◆ and similar costs

- Addressed through normal tests on financial capability of the store Operator and partners

What Risks and Liabilities?



- Known liabilities (with minor cost uncertainty)
 - ◆ Decommissioning
 - ◆ Injection phase and post-closure monitoring

- Possible risks (low probability / low costs)
 - ◆ Geological seepage

- Possible risks (low probability / significant costs)
 - ◆ Leaking wellbore

- Extreme risks (very low probability / very high costs)
 - ◆ Major loss of containment
 - ◆ No known technical solution



Nature of liability or risk to be provided for	Possible means of addressing risks and liabilities						
	Funded from cashflow	Corporate Guarantee	Letter of Credit	Bond or Cash Deposit	Insurance	Some form of CCS Fund	State carries risk and liability
Monitoring costs during injection	✓	✓	✓	✓	✗	✗	✗
Remediation costs during injection	✗	✓	✓	✓	✓	✓	✗***
Minor leakage during injection (purchase of EUA's)	✗	✓	✓	✓	✓	✓	✗***
Major leakage during injection (purchase of EUA's)	✗	✗	✗	✗	✗	???	✓
Decommissioning	✗	✓	✓	✓	✗	✓	✗
Premature decommissioning	✗	✓	✓	✓	✓	???	✗
Monitoring costs post-injection	✗	✓	✓	✓	✗	✓	✗
Remediation costs post-injection	✗	✓	✓	✓	✓	✓	✗***
Minor leakage post-injection (purchase of EUA's)	✗	✓	✓	✓	✓	✓	✗***
Major leakage post-injection (purchase of EUA's)	✗	✗	✗	✗	✗	✗	✓
Monitoring costs post-handover to the state	✗	✗	✗	✗	✗	✓	✓

✗

A red cross indicates that this form of financial security is not appropriate to that risk or liability

✓

A green tick indicates that this form of financial security is appropriate to that risk or liability

???

Red question marks indicates that a CCS Fund may be suitable to address this liability dependant upon the design of the fund.

✗***

A red cross with asterisks indicates that it may be necessary for the state to assume this liability in the early stages of CCS demonstration until a CCS Fund has built to an adequate level.

Financial Security options

CCS Fund – options (1 of 2)



Fund name	Description	Pros	Cons
Insurance Pool	<p>An Insurance industry pool</p> <p>Underwriters commit a certain level of insurance cover in return for an annual premium.</p> <p>This would be similar to the “Pool Re” terrorism insurance pool with the State providing unlimited cover in excess of insurers’ participation.</p>	<p>Provides immediate access to the full sum insured, so is able to fund long term liabilities associated with the first few demonstration sites as well as other sites in the future.</p>	<p>Difficult to price new risk</p> <p>May not fit the insurance syndicates appetite for risk</p> <p>Difficult to allow competitors to cooperate in a competitive market</p> <p>Will require political will to encourage it’s the formation e.g. Pool Re (UK) or the Price Anderson Act (USA).</p>

Financial Security options

CCS Fund – options (2 of 2)



Fund name	Description	Pros	Cons
Industry Fund	<p>Insurance industry managed. Capped, revolving fund Industry collects levy on behalf of government and administers claims.</p> <p>Similar to the Motor Insurance Bureau - small levy on each car insurance policy to deal with uninsured drivers.</p>	<p>Could work well with a small levy per tonne stored.</p> <p>Could accumulate significant funds over the lifetime of projects to deal with long term costs (e.g. monitoring)</p> <p>Insurance industry expertise could vary the levy with risk and as fund grows.</p> <p>The insurance industry has the necessary skills and experience to manage such a fund.</p>	<p>There will be an early shortfall in fund.</p> <p>There is a risk of an excessively large fund if it is not managed appropriately.</p>

Financial Security Consultation

EU Guidelines



- 4 Guideline documents issued for consultation 18th June 2010
 - ◆ Financial Securities is a 55 page document prepared by consultants
- Underlying assumption – the Operator will fail to undertake its responsibilities
 - ◆ Assumes funds must be available to CA to undertake work
 - ◆ States that risk-weighting is unacceptable
 - ◆ 25% contingency (as a minimum !!!)
- States that routine operating costs to be covered by a Financial Security
 - ◆ Reporting of monitoring plans / updating of corrective measures plan during injection (as well as post-injection)
- Guidelines reinforce the enormous commercial hurdle to each project
 - ◆ confirms and reinforces major exposure to liabilities
- Creates a CCS roadblock in their current form



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