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File Ref.: Correspondence/Government/DCENR

Ms. Orla Ryan,
Petroleum Affairs Division,
Department of Communications, Energy & Natural Resources,
Leeson Lane,
Dublin 2

Re: Public Consultation on Draft Heads of Petroleum and Extraction (Safety) Bill 2007

Dear Ms. Ryan,

Further to our letter of 25th April and our meeting on the 8th May, please find attached a supplementary note in relation to the Application of Safety Case Regulations. This sets out in more detail a proposed approach to the concern expressed in paragraphs 1 and 3 of the letter of 25th April.

If you have any queries, please do not hesitate to contact us.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'M.V. Murray', with a long horizontal flourish extending to the right.

M.V. Murray
Engineering & Projects Manager

c.c. D. Toomey

DISCUSSION NOTE

Application of Safety Case Regulations to Petroleum Exploration and Extraction Activities

This note has been prepared to supplement the submission made by Marathon Oil Ireland Limited (MOIL) on the 25th April 2008 in relation to the Public Consultation process on the Draft Heads of Petroleum Exploration and Extraction (Safety) Bill 2007.

1. Background

The intention of the proposed legislation is to confer statutory responsibility for the Safety of Petroleum related activities to the Commission for Energy Regulation (CER) and to allow the CER to establish a safety framework for this purpose. The proposed Safety framework will include a requirement for petroleum undertakings to implement a safety management system and to prepare a safety case (Head 4 of draft) to cover “ *all petroleum exploration and extraction infrastructure and associated processes, as appropriate*”.

The concern expressed by MOIL was that the definition of “petroleum exploration and extraction infrastructure” needs to be clearly set-out so that there is no confusion as to what areas of activity require a safety case, and to avoid “double-legislation” where an activity may already be covered by other safety legislation. A proposed definition basis is set out below.

2. Safety Case Regime

The general use of a “Safety Case” approach to regulatory and monitoring safety management of industrial activities is well established in a number of sectors, for example; nuclear, railways, chemical industries etc. It has been widely applied to oil/gas related activities in the last 20 years, notably in the U.K and Australia. More recently, it has been applied to the operations of gas undertakings in Ireland (ref: “A National Gas Safety Regulatory Framework for Ireland”, CER, Oct 2007 CER/07/172).

Normally, a Safety Case is required for the construction, installation or use of infrastructure which supports an activity which may be hazardous or pose a public safety risk, for example, chemical plants, nuclear reactors, oil/gas production facilities.

3. Definitions of Petroleum Exploration and Extraction Activities

Head 2 of the proposed Bill is to provide for

“ ... define petroleum exploration and extraction so that ... the safety regime will ensure the safety of ... petroleum exploration and extraction infrastructure.. ”

Head 3 of the proposed Bill includes a provision for the CER to:

“ ... regulate the activities of petroleum exploration and extraction undertakings, with respect to public safety ”

The primary concern is that the distinction between activities and infrastructure is recognised in the legislation and implemented by the CER. This is because not all petroleum exploration and extraction activities typically involve the use or installation of infrastructure either on a temporary or permanent basis. In particular, early phase

petroleum exploration activities typically involve surveying activities, which are transient in nature and which do not involve the installation or construction of any infrastructure. (A brief summary of the typical phases of an oil/gas exploration/extraction project is given in attachment 1)

We note in particular, that the proposed wording under Head 3, subsection 1J, (b) (ii) provides for “ ... a system for inspection, auditing and verification of all petroleum exploration and extraction equipment, structures and processes”. This wording appears to differ from that in the Energy (Miscellaneous Provisions) Act 2006, in relation to gas undertakings ref Section 12 (b) (1G) (b) (i):

“... a system for the inspection and testing of all natural gas transmission and distributions, pipelines, storage and LNG facilities.”

The purpose of the word “processes” is not clear and moves away from the clear application to “facilities” in existing legislation

It is proposed that the legislation needs to specifically define the classes or types of activities for which a Safety Case is required and that these definitions should be based on existing legislative definitions, for example:

- “offshore installations” (as defined in Safety, Health and Welfare at Work (Offshore Installation) Act 1987)
- “strategic upstream infrastructure” (as defined in Strategic Infrastructure Act)
- “pipelines” (as defined for example in the Gas Acts or the Gas (Interim Regulations) Act)

Note: “Offshore installations” covers fixed and mobile installations and would therefore include drilling rigs used for well drilling, as well as fixed or mobile production facilities.

Similarly, petroleum exploration activities which do not involve the construction or operation of infrastructure, as defined above should be excluded; this would include for example:

- Seismic surveying
- Environmental surveying, including soil sampling etc.
- Aerial surveying

It should be noted that the equipment used in these types of activities would be covered by existing safety legislation – under Marine and Aviation law, and by general safety requirements under the Safety, Health and Welfare Act at Work Acts.

As noted previously, there is a large body of legislation in the UK on the application of a Safety Case regime to the offshore oil and gas industry, and the U.K may be regarded as a mature area with an established record in this area. The approach taken in the U.K is to require any “offshore installations” or any operation conducted on or from an “offshore installation” to have a safety case i.e. the requirement is linked to a particular piece of infrastructure. (The Offshore Installation (Safety Case) Regulations 1992 UK SI 1992 No 2885)

This appears to be consistent also with the approach taken by CER in the regulation of gas undertakings, for example a gas storage undertaking is defined as a “*facility under the control of an operator....*” (ref Safety Case Guidelines, Dec 2007, CER/07/226)

ATTACHMENT 1

TYPICAL PETROLEUM EXPLORATION/DEVELOPMENT CYCLE

The summary set out below is an attempt to outline a typical cycle of activities for a petroleum licence moving from award through various stages of exploration to development and production.

1. Licence Award: Desktop studies; regional data evaluation; development of work program
2. Field Surveys: Marine geophysical surveys, airborne magnetic surveys, (possibly, regional environmental surveys)
3. Exploration Drilling: Well drilling, well testing; (NB: first installation of “facilities” – a well or wells)
4. Development Planning/Surveying: marine geophysical surveys, pipeline route surveys, environmental surveys, engineering studies, economic studies
5. Field Development: Well drilling, pipeline construction, facilities installation (subsea, platform, floating or land based)
6. Field Production: Hydrocarbon delivery, facility modifications or upgrades, new-field tie-backs, well drilling or workovers
7. Field Abandonment: well plugging, facilities decommissioning, equipment removal, site remediation

This is a non-exhaustive, but illustrative list; it is proposed that any Safety Case requirement would be associated with phases 3, 5, 6 and 7, i.e. phases which involve installation, use or removal of petroleum infrastructure.