New safety data shows need for Life-Saving Rules

IOGP has been collecting safety incident data from member companies since 1985 – giving the Association the largest database of safety performance in the upstream oil and gas industry. As in previous years, the 2016 report covers worldwide exploration and production – both onshore and offshore – from Member Companies and their contractor employees. The newly published Safety performance indicators – 2016 data report is based on the analysis of 2.9 million work hours, down 22% from hours reported in 2015. Forty-three companies, operating in 103 countries, submitted data. The report shows that the Fatal Accident Rate (FAR) for reporting companies has increased by 19% compared with data for 2015. The number of deaths decreased from 54 in 2015 to 50 in 2016. The number of fatal incidents also went down, dropping from 40 in 2015 to 29 in 2016.

IOGP AGM: Members endorse new MC and approve special resolutions

IOGP member representatives gathered in London on 31 May for the Association’s 43rd Annual General Meeting (AGM). The session attracted participants from 13 countries on four continents. During the course of a busy agenda, the AGM, led by Management Committee (MC) Chair Monika Hausenblas of Shell, featured two external presentations (also covered in this Highlights) and votes on endorsing the results of the February 2017 MC ballot and on a series of special resolutions to revise IOGP’s Articles of Association. Among these were measures to expand the MC – in terms of numbers and composition – to more accurately reflect the profile of the Association’s membership. All were unanimously approved.
Improvements were seen in personal injury performance. Lost time injury frequency decreased by 7% and the total recordable injury rate went down by 15% compared with 2015 results.

For the past several years, review of the annual data has included analysis of fatal accident descriptions in relation to the IOGP Life-Saving Rules, published in March 2012 as IOGP Report 459. These Rules, now considered industry good practice, are intended to supplement and support existing company management systems programmes and policies. Each Rule – represented in the document by a simple icon and guidance in everyday language – is also linked to controls and barriers which, if used properly, can prevent or avoid fatal incidents.

Analysis of 1,484 fatal incidents reported by IOGP member companies over the last twenty years indicates that adopting, conforming to and enforcing the simple IOGP Rules may well have prevented many of these fatalities.

The safety data for 2016 shows that 58% of the fatal incidents reported were related to the IOGP Life-Saving Rules – a slight improvement to the 70% of fatalities in 2015 that could have been attributed to failures in following Rules.

As IOGP Executive Director Gordon Ballard explains: ‘Some may want to pin these issues on squeezed margins, job uncertainty or doing the same (or more) with less. However, the data do not support that premise, and the hard truth is that commitment to following the Life-Saving Rules should not be affected or rationalized by market conditions. IOGP data show that there are no “new” accidents; only failures to learn or to implement learnings from previous incidents. The Life-Saving Rules have been proven to save lives and the real challenge lies in finding out why these Rules aren’t consistently followed.’

To understand these challenges, IOGP has strengthened its existing Safety Committee, and appointed senior safety leaders from some of the largest oil and gas companies to oversee Committee activities.

One of the key aims is to rejuvenate awareness of the Life-Saving Rules to prevent fatal incidents. As was done when the Rules were initially launched by IOGP in 2013, the group is revisiting the Life-Saving Rules, re-investigating, based on our data, which aspects of day-to-day workplace life will have the greatest impact in eliminating fatalities. This critical information will be used to deploy the most effective means to raise awareness of activities that are most likely to result in fatalities – and modify worker and supervisor behaviours accordingly. As with the current Rules, the results of this project will determine simple actions individuals can take to protect themselves and others.

Both Safety performance indicators – 2016 data and Life-Saving Rules are available for free downloading by registering with the IOGP Bookstore on www.iogp.org/bookstore

North Oil Company joins IOGP

The Association’s newest Member is a joint venture between Qatar Petroleum and Total – also IOGP Members.

The company’s remit – starting 14 July of this year – is to operate and further develop the Al-Shaheen oil field for the next 25 years. Situated off the north-east coast of Qatar, 80 kilometres from Ras Laffan, the Al-Shaheen field is ‘one of the largest and most complex of its kind in the world,’ the company says. Annual production of 100 million barrels from 33 platforms and 289 wells accounts for 45% of Qatar’s oil output. The field has been producing since 1994.

‘North Oil Company is committed to delivering safe, best-in-class operations and technology; role-modelling trust, respect and diversity; empowering people to reach their full potential and creating sustainable value’ for its shareholders, the company says. North Oil Company’s IOGP member representative is Denis Gauthier, HSEQ Vice President.
As a result, IOGP’s MC now consists of BP, Chevron, ConocoPhillips, Eni, ExxonMobil, Shell, Statoil, Total and Baker Hughes. In addition to Monika as Chair, the officers are Fawaz Bitar of BP and Craig May of Chevron as Vice-Chairs.

And in future, MC membership could include smaller member companies and or national oil companies. Moreover, the MC will be able to act more quickly than previously in approving or rejecting applications – and so be more responsive in an era of quickly-changing geopolitics.

As has become customary, the AGM also provided the opportunity for an update on developments and achievements since the previous meeting – in this case the Milan Extraordinary General Meeting (EGM) in November 2016.

As Monika explained, the AGM updates were in the context of ‘how the Association is putting into practice the refreshed strategy that we agreed to last year’:

- Broadening the Association’s advocacy role;
- Enhanced engagement with, and implementation of, common standards within the industry;
- More effective promotion and distribution of IOGP reports and recommended practices.

Presentations from IOGP Executive Director Gordon Ballard, Safety & Security Director Chris Hawkes, Technical Director John Campbell and Deputy EU Director Christian Schwarck are all available on the Members’ area of IOGP’s website.

Monika also provided information on the Association’s next universal gathering, an EGM in Houston, Texas on 8-9 November 2017. ‘Aside from being America’s oil and gas capital, it’s a city that is fairly accessible from almost anywhere in the world which should make travel as easy as possible for participants,’ she said.

Lord Cullen: Human factors ‘a matter of life and death’

IOGP’s Annual General Meeting on 31 May welcomed the Right Honourable Lord Cullen of Whitekirk, probably best known in the upstream oil and gas industry for his landmark report on the Piper Alpha incident. As Management Committee Chair Monika Hausenblas put it, this document ‘has become a safety blueprint for offshore installations and their regulation. His 106 recommendations were all accepted by the industry and remain standard practice 30 years on.’

Lord Cullen addressed the AGM in the self-described capacity of an ‘observer/investigator’, to help determine why things go wrong in oil and gas operations. While history does not repeat itself in detail, underlying reasons do – which is why he stressed it is worth looking at significant case studies and understanding the role of human factors in each of them.

He went on to cite examples from the Three Mile Island reactor incident in 1979, Piper Alpha in 1988, Montara in 2009, Texas City in 2005 and the Deepwater Horizon in 2010. In each of these, he noted, human factors either caused the incident or made it worse. These human factors included systemic shortcomings, confusing procedures (particularly those involving permits to work), control room deficiencies, insufficient training, ineffective coordination and communication, lack of a reporting and learning culture, confusing low personal injury rates as indicators of process safety performance, unjustified assumptions about success, lack of awareness of risk factors and normalizing signs of danger.

Lord Cullen stressed that managing human factors is crucial to effective safety management overall. Workforce commitment to safety depends on sound leadership, involvement and communication. The working environment should promote safety and guard against human failure and its consequences.

‘It is as important as a matter of life and death’, he concluded.

During the course of a lively question and answer session, Lord Cullen emphasized the need for industries to learn from one another and urged companies to be better about absorbing the lessons from their own failures and near-misses. He went on to applaud the work of organizations such as IOGP in helping to encourage this degree of introspection and sharing conclusions to be drawn.

Further work is needed on leadership and human factors and the practical applications of corporate memory, he said, and IOGP is ideally placed to do that work.
Spencer Dale of BP forecasts the global energy market future

After cautioning the AGM that ‘all forecasts are wrong’ BP Group Chief Economist Spencer Dale explained the background to the company’s *Statistical Review of World Energy and Global Outlook*. Rather than predicting the future, he said, forecasts should be used to better understand current uncertainties and plan a range of actions in line with those uncertainties. Forecasts are also a way of avoiding ‘group think’, he added.

His presentation focused on the 30% rise in energy demand predicted within the next 20 years, largely attributed to growth in Asian prosperity.

Concerns over climate change notwithstanding, oil and gas will play vital roles in maintaining security of supply for a growing world population. Particularly important will be the role of gas in power generation, while the role of coal diminishes.

News on carbon is mixed, Spencer said. While increases in carbon emissions should be about one third of the growth in carbon releases in the past 20 years (due to efficiency improvements and shifts in the fuel mix away from coal to gas and renewables), growth in carbon emissions is still likely to continue.

And while demand for oil is expected to rise, the dominant source of growth will shift from transport to non-burning uses such as petrochemicals, feedstocks and lubricants by the end of the outlook period. Supply is not a constraint on the growth in oil demand, with abundant resources available – some 2.5 trillion barrels of oil technically recoverable, he said.

On the subject of electric cars, he noted that there are currently two million on the road today – out of one billion cars in total. Although this will rise to 100 million electric cars in BP’s central projection, they will still only account for 4-5% of cars on the road; reducing oil demand by no more than 1%. Even if electric car growth occurs at double the projected rate, this will not be a ‘game-changer for oil demand’ within BP’s 20-year forecast window. Greater impact from the ‘mobility revolution’ will come from autonomous vehicles as well as more car-sharing and car-pooling, he said.

Natural gas will be the fastest growing fossil fuel over the next 20 years, much driven by US shale gas production. As part of that growth, LNG will become increasingly important because it is relatively easy to transport to meet global market demands. This opens opportunities for arbitrage, he said.

In response to questions, Spencer focused on the expanding electrification of the world and the opportunities this offers for gas and how ‘the oil and gas industry must strive to be – and be seen to be – a part of the carbon solution.’