UKOPA

United Kingdom Onshore Pipeline Operators' Association

UKOPA/06/0017

Notes of the Meeting held at the George Hotel, Stamford on 18th/19th January 2006

Present:

P. Brown, Planning Manager, UK Distribution, National Grid (Chairman).
R. Ellis, Manager, Pipeline Group, Shell UK Ltd.
M. Harrison, Olefins S&D Operations Manager, Huntsman Petrochemicals (UK) Ltd.
L. Boswell, Pipeline Availability Team Leader, bp FPSI.
T. Williams, Total UK Ltd
N. Jackson, Transmission Standards Manager, UK Distribution, National Grid.
T. Stonehewer, Compliance and Monitoring Manager, UK Transmission, National Grid.
D. Perry, Engineering Manager Network Policy, National Grid.
J. Trounson, UKD Policy Manager – Transmission, National Grid.
E. Reeder, Contract and Services Team Leader, Innovene, BP.
R. Michie, Transmission Operations Manager, BG Group.
B. Mckay, Pipeline Users Group (PLUG).
J. Varden, General Manager, OPA.
M. Baldwin, Engineering and Maintenance Team Leader, e.on UK Ltd.
D. Cullen, Senior Pipeline Supervisor, Shell Expro.
B. Proud, SHE & Coordination Manager, SemUtilities Solutions.
T. Taylor, Pipeline Plant Manager, Esso Petroleum Co. Ltd.
D. Gray, Pipeline Protection Engineer, Esso Petroleum Co. Ltd.
P. Mitchell, Contract Manager, Unipen Ltd.
M. Price, Operations Manager, BPA.
L. Haw, Huntsman Petrochemicals (UK) Ltd.
B. Keyes, Head of Network, Scotland Gas Networks.
S. Wing, Head of Unit, HSE (19th only)
S. Chatfield, Head of Operational Policy, HSE (19th only).
R. McConnell, Consultant.
J. Haswell, Consultant, Pipeline Integrity Engineers Ltd.
W. P. Jones, Pipeline Integrity Engineers Ltd, (Secretary).

1. Welcome and Introductions

The Chairman proposed a vote of thanks to Robert White and Total UK Ltd for arranging the meeting, and thanked Terry Williams of Total UK Ltd for attending to host the meeting. He extended a special welcome to Bert Keyes of Scotland Gas Networks who was attending for the first time, and also to:

i) Ian Drummond and Mike Smith of RGB Mach Ten who were attending to give a presentation on inspection of inaccessible pipes using guided wave technology.

ii) Andrew Cosham of Penspen who was attending to give an update on the Pipeline Defect Assessment manual (PDAM).

iii) Lee Robins of Tracerco who was attending to give a presentation on the use of Radio-Isotope Tracers in Fault Finding and Problem Solving in Process Plants and Pipelines.

He also noted that Steve Wing and Steve Chatfield of HSE would be attending the meeting on the 19th, and that Steve Wing would be attending the evening meal on the 18th January.

2. Apologies

The Secretary reported that apologies had been received from:

R. White, General Manager, Total (UK) Ltd.
K. Curtis, Pipeline Engineer, e.on UK Ltd.
P. Williams, Head of Operations, UKD Construction National Grid.
P. Roberts, Asset Strategy Manager UK Transmission, National Grid.
C. Gorman, Network Operations Director, Northern Gas Networks.
M. Alderson, Network Integrity Engineer, Northern Gas Networks.
P. Davis, Director and General Manager, BPA.
D. Bruce, UNIPEN.

3. Inspection of Inaccessible Pipes using Guided Wave Technology – Ian Drummond and Mike Smith of RGB Ltd.

RGB Ltd provide a range of NDT services, of which guided wave inspection is a specialist technique used to assess inaccessible pipeline and pipework sections. This is a non-intrusive ultrasonic technique, which interrogates a volume of pipe and indicates the loss of material volume. The technique allows screening of significant lengths of pipe, the actual length of which depends upon the quality of the pipe coating and environment. Typically, the method can be used to inspect 400 – 500 metres/day of above-ground clad pipe. For buried pipe, the average length which can be covered in a single inspection is 25 metres. The technique is ideal for detection of the presence of corrosion of clad above ground pipework, pipework routed through walls and bulkheads and for underground sections/road crossings. It can indicate the presence of loss of metal, but cannot identify the actual volume, or detect defects such as cracks or weld misalignment.

R Michie stated that BG had used this technique extensively and successfully for screening assessment of road crossings in Argentina.

The slides used by Ian and Mike in their presentation have been posted on the Members' section of the website – reference UKOPA/06/0005.

A number of questions arose during/after the presentation:

Question: What is the typical length of buried pipeline that can be inspected?

Answer: The average length of below ground pipeline is 25m, 60m above ground. The effective length is influenced by the coating, diameter and the amount of corrosion.

Question: Is the equipment intrinsically safe?

Answer: No, but it is regularly used in hazardous areas.

Question: Can the technique be applied to inspection of carrier pipe in welded sleeves?

Answer: Yes, but if there is a forged end seal the signal passes through the weld and this affects the length which can be inspected.

Question: What is the smallest defect that can be detected?

Answer: Size is not guaranteed, but generally 20% through wall corrosion. The technique is used to screen defect sizes, for example category A – up to 20%, category B – 20%-40%, category C >60%. Locations for intervention can be selected using the results. In addition, the technique is highly repeatable, the probe and sensor can be positioned using GPS, and results from subsequent inspections can be used to assess any change in condition.

Question: Will the technique work with other material such as polyethylene?

Answer: Do not know but will find out. It should provide useable results for stainless, cast iron and hard plastics.

Question: Will the technique identify laminations?

Answer: Yes, as it detects loss of metal volume. It will not identify whether this is internal or external.

Question: Where pipe is encased in concrete, could any contact between rebar and the pipe surface be detected?

Answer: Yes, this would be detected as an anomaly, not as metal loss.

The Chairman thanked Ian and Mike for an extremely interesting and informative presentation and for the time they had spared to attend the meeting.

4. Pipeline Defect Assessment Manual (PDAM) Update – Andrew Cosham, Penspen.

Andrew Cosham's presentation covered what PDAM is, its background, overview, contents, methods of assessment and limitations. In addition, he explained the operation of the sponsor group responsible for the development of PDAM. The slides used by Andrew in his presentation have been posted on the Members' section of the website – reference UKOPA/06/0006.

Following the presentation, the following questions were raised:

Question: Does PDAM apply to oil and gas pipelines and are these different?

Answer: The difference lies in fracture propagation only and therefore affects the leak rupture boundary.

Question: PDAM was developed through a joint industry project. Is this available to anyone?

Answer: Only access is to join as a sponsor, the costs of this are £20k per joining fee.

Question: If the organization is already a sponsor, can anyone in the organization get access to PDAM?

Answer: Yes.

Question: Is there a supporting competency framework available so that when putting PDAM into practice, the technical application is consistent?

Answer: This aspect is dealt with by the sponsor organisations. Some sponsor procedures allow the application of special methods. In such cases, PDAM is used as a first approach to be applied by specialists. In other cases, the sponsors use PDAM as the basis of their internal procedures. In short, this depends on how individual sponsors apply PDAM. Responsibility for the competency of those applying PDAM lies with the sponsor organisations.

Question: What is the current position with regard to the development of PDAM?

Answer: The next development of PDAM which is named PDAM+, will be developed as new sponsors join the sponsor group. This may involve release of aspects of PDAM as an industry standard.

Question: Is the intellectual property of PDAM jointly owned by the Members?

Answer: Penspen APA own the intellectual property but the standard JIP terms and conditions allow all sponsors indefinite use of the intellectual property.

Question: Who are the primary contacts for PDAM?

Answer: Andrew Cosham and Phil Hopkins of Penspen Integrity.

Question: Would it be possible for UKOPA as a joint organization to join the sponsor group?

Answer: The sponsors would need to be consulted with this, but there are difficulties for organisations such as UKOPA which represent a number of operating companies.

Question: In your presentation, you sate that PDAM lies between a standard and expert guidance document. Is there any way it could be used as the basis for publishing a practical guide or defect assessment specification for wide use by operators?

Answer: The detailed technical content is confidential to the sponsor group, but it may be possible to obtain agreement to publish - for example - defect acceptance charts based on PDAM. This perhaps could be progressed by UKOPA through the Newcastle University Centre for Excellence in Pipeline Engineering.

Question: How is the £20k joining fee used to fund ongoing research?

Answer: Future work will be encompassed in proposals for PDAM+ which are to be agreed by the sponsor group. This will be primarily funded by new sponsors. Some money is available from current sponsor funds for an update to PDAM.

Question: Is training available for the application of PDAM?

Answer: Yes, Penspen runs defect assessment courses and also specific PDAM application courses.

The Chairman thanked Andrew for his informative and relevant presentation, and for taking time to attend the meeting.

5. On-Line, Non-Intrusive Diagnostic Techniques for Pipeline Pigging, Inspection and Flow Assurance – Lee Robins, Tracerco

Lee Robins' presentation covered an outline of the company and detailed explanation and demonstration of the inspection techniques using Radio-Isotope technology. The slides used by Lee in his presentation have been posted on the Members' section of the website – reference UKOPA/06/0007.

Following his presentation, the following questions were raised:

Question: Would the technique identify a pool of static water in an oil pipeline?

Answer: Possibly, a pool of static water will affect oil velocity and therefore it should be detectable.

Question: Does the technique detect density change?

Answer: This would be picked up by scanning the flow, it is not directly measurable.

Question: Are deposits detected in a pipeline radioactive?

Answer: LSA deposits are radioactive and emit alpha and beta radiation. This is much lower than the gamma source used for detection and does not interfere with the signal.

Question: Are there any safety issues regarding maintenance engineers following the injection of an isotope tracer into the pipeline product?

Answer: No, the isotope tracer fluid is harmless.

Question: Does this apply to venting?

Answer: Venting is usually stopped during measurements, but the operating license does permit small releases.

Question: How are types of deposit characterized?

Answer: Gamma rays are absorbed by the amount and density of the material so one or other of these parameters must be known to measure and characterize the deposit accurately.

The Chairman thanked Lee for his interesting and relevant presentation, and for taking time to attend the meeting.

6. Feedback from the UKOPA On-Line Inspection Questionnaire, open discussion on the Workshop and Possible Topics for Future Meetings

The Chairman introduced this item by referring to discussions held at the last meeting and the agreement for Roger Ellis to develop and issue a questionnaire. He invited Roger to summarize the results obtained from this feedback and lead the discussion into the findings.

Roger thanked all Members for the returns obtained. The results are summarized in the slide Reference UKOPA/06/0008. In summary, eleven individual companies have supplied data and the returns relate to OLI inspection of 10,000kms of pipeline or 251 pipeline sections, 166 have been completed and 85 are planned. The feedback covers Members' experience of using three different pigging companies and a range of products, although this is dominated by methane pipelines. Referring to the detailed results, Roger stated that the returns had raised a number of issues and, following complete collation of all the information, this would be shared and would be used as the basis for discussion and sharing of best practice at a future meeting. He proposed that all remaining returns should be available by mid February.

Action: Members.

With regard to data sensitivity, John Vardon noted that some issues in particular relating to contractor performance may need to be treated with caution. Roger Ellis agreed with this, stressing that the information must not be misused. John Vardon stated that difficulties and good experience need to be shared so that the price is not the sole determinant when selecting a pigging contractor.

Roger Ellis asked Members to consider what other topics should be raised. Phil Brown encouraged Members to broaden out the topic so that information which Members found useful could be obtained. In response, Linton Haw stated that the type of pigs, tracking method and methods used for locating defects after pigging would be of great interest. In this connection, several Members noted that the 'xyz' plotting with reference markers is proving to be very cost effective and may be worthy of further discussion. Dick Gray noted that the payback is obtained following the first run and significantly reduces the costs associated with locating defects with subsequent digs. The technique accurately locates all pipeline welds with respect to above-ground markers and GPS locations.

Tony Taylor noted that Esso had recently carried out a transverse flux pig run on a pipeline and had now confirmed that this pig did not record a crack that was not associated with a weld. In comparison, the ultrasonic tool detected eighteen crack-like defects, one of which was 50% through-wall. This crack was in a dent, not associated with the seam-weld.

Lindsay Boswell noted that BP had suffered coupling failures during pigging runs of the dual module pig, and he recommended that Operators should consider a verification process to apply to pigging company calculations. Roger Ellis picked up this point, noting that the cost of re-runs are often at the company's own cost and the assurance checks against the vendor quality process may be worth wider discussion. In this respect Blair McKay commented that the contractual agreement required detailed consideration and tying down of detail. John Vardon stated that direct costs can often be readily recovered but indirect costs are difficult to recover. These are associated with the best endeavours of the team on the day and in particular it was agreed that effort should be expended to ensure that the contract was clear and that premeeting(s) should be held with the pigging contractor and any subcontractor(s) before commencement of the operation. Blair McKay stated that PLUG was interested in establishing a process whereby verification of the accuracy of results could be subject to continuous assessment, and it was noted that this could be a possible area for future collaboration.

Linton Haw stated that the process of applying, gauging and cleaning pigs was not transparent, i.e. selecting the right pig for the right job and the right pipeline. A logic process in which the different tools could be selected would be of use. John Vardon also noted that the CONCAWE Oil Management Group annual report on leaks does include a section on line inspection.

Roger Ellis concluded the discussion by requesting open questions or solutions to be forwarded to Phill Jones with the objective of establishing best practice.

Action: Members

7. Notes of Previous Meeting and Actions arising – UKOPA/05/0122

7.1 Notes of Previous Meeting

The notes of the previous meeting were accepted as a fair record of discussions and will be signed by the Chairman.

7.2 Actions Arising not covered on the Agenda (note of previous meeting in brackets).

7.2.1 Emergency Planning Working Group (EPWG) (6.2.1)

Neil Jackson had confirmed that this was a presentation (not a document) and that he had requested approval to circulate within UKOPA.

Neil reported that the presentation had been circulated.

Action: Closed.

(iii) *Members to provide contact details for representatives of Emergency Planning Authorities so that they can be invited to attend PERO courses*.

No details have been provided to date. It was agreed Members would follow up as appropriate.

Action: Closed.

7.2.2 UKOPA Fact Sheet (6.2.4)

Phil Brown to arrange for more copies to be published and circulated to Members.

Action completed and closed.

7.2.3 Emergency Planning Work Group (EPWG) (6.2.5)

(i) *Jane Haswell reported that John Wilson had now prepared a page relating to the PERO courses for inclusion on the Sembcorp website. A link from the UKOPA website will be arranged in the near future.*

Jane Haswell confirmed that the webpage had been drafted, but was not available in updated form on the Sembcorp website. She agreed to pursue this.

Action: Jane Haswell.

(ii) *EPWG to produce guidelines on management of damaged pipelines for inclusion in the PERO*

course

Jane Haswell reported that N Jackson had provided a Transco procedure which had been used to draft a generic procedure. EPWG considered that emergency management of liquid pipelines was not adequately covered. Example procedures in use by liquid pipeline operators had been requested, but none had been received. Ed Reeder agreed to provide some generic material developed by BP for training purposes.

Action: Ed Reeder and Jane Haswell.

7.2.4 Group of Experts to Advise the Commission on a Strategy for Dealing with Accidents in the Transport Sector (refs UKOPA/04/0099 to 0101 inclusive) (6.2.6)

Tony Taylor to keep UKOPA informed of discussions.

Tony reported that a further meeting of the Group had taken place. The Group considered that 3rd party interference was the key consideration in avoiding pipeline failure, and measures to reduce this were required. A joint working group comprising CONCAWE and Marcogaz reported work which concluded there was little relationship between regulation and the incidence of major accidents. Tony had presented the UKOPA work relating to the Infringement database. and this had been received with interest. There are a further two meetings planned before the Group reports to the Commission in August of this year, and Tony agreed to report the outcome back to UKOPA.

Action: Tony Taylor.

7.2.5 Safe Isolation of Plant and Equipment (6.7.2)

Dave Perry reported that comments submitted had been incorporated, and a final draft was to be issued.

7.2.6 Safe Working Distances from Wind Powered Generators (6.2.8)

P Jones to post copy of report on the website.

Action completed and closed.

Linton Haw reported that he had provided a copy of the document to a Planning Authority, who had used the guidance provided successfully. It was agreed the document will be posted on the public section of the website.

Action: Phill Jones.

7.2.7 Feedback from the PD8010 Questionnaire (7.2)

Neil Jackson to amend the introduction on the website and the document itself to more accurately define its scope and purpose and enhance the document if considered essential.

N Jackson reported that a review of the document UKOPA/99/073 had been carried out to identify essential updates/revisions. Recommendations had been circulated as UKOPA/06/0004. These recommendations were summarised and agreed. J Haswell agreed to update the document in line with the recommendations.

Action: Jane Haswell.

7.2.8 Standard Pipeline Crossings (16)

Donal Cullen and Neil Jackson to prepare a draft UKOPA document based on the Transco document for consideration by members

Donal Cullen reported that he and Neil had exchanged documents as actioned and, at Neil's suggestion, Paul Swinborne, Land Agent, National Grid, would prepare a 'best of breed' document for UKOPA consideration and acceptance. Donal noted that any impact relating to legal obligations identified in the Linewatch document would be identified and highlighted.

Phil Brown supported the intention to develop this document to provide Operators with a starting point for discussion and agreement with 3rd parties.

Action: Donal Cullen / Neil Jackson.

7.2.9 UNECE Draft Safety Guidelines/Good Practice for Pipelines (17)

P Davis to obtain a copy of 2nd draft for UKOPA, to feed any comments back via CONCAWE and to provide an update at the next meeting.

Action: Ongoing

All other actions covered on the agenda.

8. Pipeline Industrial - 2005 Rating Revaluation.

8.1 Actions Arising (14)

Members to report any approaches to Roger, Keith Norman or Phil Glenwright

Roger reported under the update.

8.2 Update

Roger Ellis provided an update in line with the slide which is posted on the website – reference UKOPA/06/0009. Key points noted and discussed were:

- 31 projects were considered by the Valuation Office (VO) and, following consideration of these, a position had been established regarding the calculation of pipeline rating valuation based on a consideration of realistic data.

- Project data supplied by National Grid (M Alderson, now Northern Gas Network) had confirmed that original data proposed for use by the VO over-estimated the cost of smaller diameter pipelines.

- Negotiations based on the above had achieved a no increase in rating value position, with possible specific reductions of up to 10%.

- The application of transitional relief by the VO means there will be no increase in 2005/6, and rate charges for 2006/7 will not be as high as anticipated.

Roger summarised the way forward was that the VO will publish a memorandum of agreement based on the above, outlining the methodology for agreeing the rating value, and that Rating Agents will be asked to sign this Memorandum of Agreement. He noted that age allowance has not been discussed and can be the subject of further review outside of this agreement.

Roger concluded by stating that the sharing of information and establishing a joint position had been powerful in ensuring a successful outcome.

John Vardon noted he had received this memorandum, considered it to be a good outcome and congratulated UKOPA on achieving this position.

Day 2 – 19th January.

The Chairman welcomed Steve Wing and Steve Chatfield of the HSE, and also Robert Pitt and Holger Hennerkes of Rosen and Robert Owen of National Grid, who were attending to give presentations on the Pigging of TSEP and Pipeline Inspection – recent initiatives by National Grid respectively.

9. Pigging of TSEP by Robert Pitt and Holger Hennerkes of Rosen.

In their introduction, Robert and Holger stated that Rosen currently carried out more than 80,000 kms of in-line inspection per year of pipelines ranging from 3" to 56" diameter. Robert went on to thank BP for inviting them to share the experience gained in pigging the TSEP pipeline, which comprises two 75km sections of 12" diameter pipeline with a design pressure of 90 bar, constructed in 1999/2000. The

presentation covered the pigging project and explained a number of engineering issues which were addressed in the course of the project, and the particular problems associated with ethylene.

The slides used by Robert and Holger in their presentation have been posted on the Members' section of the website – reference UKOPA/06/0010. The following questions were raised during the presentation and subsequent discussion:

Question: What did the debris extracted from the pipeline comprise of?

Answer: Detailed analysis is being carried out, but this appeared to be primarily polymer and ferrous in nature.

Question: Could the volume of debris be the result of coarse filtration?

Answer: No, the filtration level was 10 microns.

Question: Where does the debris come from?

Answer: A significant proportion is construction debris. It appeared from the volume obtained from the northern section of the pipeline was cleaned more effectively prior to commissioning, and the construction records are being reviewed in this connection. The polymer deposits are a result of the ethylene production process.

Question: Was any consideration given to the use of lined pipelines, which can significantly reduce rust due to hydrotesting, and can ease post construction cleaning?

Answer: No awareness of this being considered at design.

Question: What caused the pig to stop?

Answer: There is no definite conclusion, it may be non-smooth transitions from standard to thick wall.

The Chairman thanked Robert and Holger for their interesting presentation, which has direct relevance to Members' responsibilities and the current consideration of pigging experience.

10. Feedback relating to On-Line Inspection of Offshore Pipelines – Blair McKay.

Blair confirmed the intention had been to provide UKOPA with feedback on the PLUG best practice workshop on pigging, but as this workshop had not yet taken place, the presentation covered BP's offshore experience relating to pigging. This covered an overview of experience relating to use of pigging technology for the inspection, detection and considerations of:

- Corrosion and metal loss
- Laminations
- Erosion
- Gouging

Experience had indicated that:

- The most reliable data was obtained using the ultrasonic tool, but this could only be used in liquids. Improvements in electronics allowed speeds to be reduced.
- In many cases, pigging companies do not provide a complete (gauging/cleaning, geometric/defect detection, location and sizing) service.
- Due to the increase in pigging tool size and multi-module tool construction, pigging companies now required increased bend radii and updated pig trap design to accommodate vertical recovery.
- Changes in jurisdiction and ownership offshore lead to difficulties and complications in logistics and contracts.
- There was often a long delay between pigging and results reporting.

Blair's presentation is available on the website reference UKOPA/06/0011.

The Chairman thanked Blair for his presentation, and encouraged Members to consider sharing similar experience and considerations.

11. Pipeline Inspection – Recent Initiatives by National Grid, Robert Owen

Robert Owen presented recent initiatives relating to pipeline inspection undertaken by National Grid in respect to:

- Revisions to the Intervals methodology for planning of inspections.
- Requirements for reporting of results.
- Participation in the pig performance JIP.

Robert described the scope and content of an internal workshop which addressed these issues in order to provide guidance and present best practice; this covered-

- Tool capability.
- Explanation of reports and the relevance of the contract reporting specification.
- Advice in relation to acting on inspection results.
- Application of the industry P11 damage assessment procedure.
- Updates to the industry procedure for on-line inspection.

Robert's presentation is available on the website, UKOPA/06/0012. Following his presentation, the following questions were raised:

Question: Is the intervals planning tool available to other operators?

Answer: Intervals was developed by Advantica, and any commercial interest should be followed up with Advantica.

Question: What is the basis of the current 15 year cap on inspection Interval?

Answer: This relates to the original development of Intervals, at which time P Jones (then Pipelines Operations Manager, British Gas NTS) required that until the system was proven, a cap interval of 15 years (based on an interpretation of through-wall corrosion growth rate) should be applied. Tony Stonehewer stated that this cap was still in place, but it was recognized this cap should be reviewed and possibly extended based on experience.

Question: What is the status of the Pigging Performance JIP?

Answer: Sponsors include BP, Gas Unie, Gaz de France, National Grid, and the purpose is to look at pigging inspection performance in terms of accuracy and reliability, modeling of performance and relevance of post inspection actions. It is intended to broaden the scope in future phases given support.

Question: What is the outcome of the first phase?

Answer: A report on what influences performance and a review of the different types of tool available, the analytical techniques which can be applied to assess tool performance.

Question: National Grid use primarily MFL pigging technology, are there any moves to use new technology?

Answer: This is being considered currently.

Question: Does NG have any views on the replacement of P11 with PDAM?

Answer: P11 is a useful and robust screening tool which can be reliably applied quickly and easily at the operational level. P11 recommends an expert assessment is applied to non-standard cases. It is NG's intention that this latter expert assessment should be based on application of PDAM.

Roger Ellis stated that Robert's presentation generated awareness of significant issues, and encourages Members to consider the issues raised as part of the ongoing initiative.

The Chairman thanked Robert for his presentation.

12. On-Line Inspection Summary and Discussion

Roger Ellis stated that following the previous discussion (Item 6), he and Phill Jones would follow up and collate outstanding questionnaire returns from Members. He stated that the presentations at the meeting had covered significant scope and demonstrated the range of technical, cost and contract issues over which shared experience could be beneficial to Operators. Following completed collation of the questionnaire responses, issues for discussion at future meetings would be identified and proposed.

Action: Roger Ellis.

13. H, S & E Issues

13.1 Actions Arising

Tony Stonehewer to prepare a short note for circulation to members and discussion at the next meeting

Action: Ongoing

13.2 Reports from Members

Phil Brown introduced this item by noting that the recent major incidents at Buncefield and the aerial survey crash associated with the National Grid surveillance contract could not be discussed at this time, but it was assumed that learning would be shared in due course. He noted that the details of the Chevron pigging incident, circulated by Roger Ellis, had been used by National Grid to generate a safety bulletin which had been circulated within the company.

13.2.1 Incident on a 7 bar Pipeline – Inverkeithing

Roger Ellis noted recent press coverage of an incident on a high pressure gas main in Inverkeithing, Scotland, involving a digger hitting a 6" steel pipeline. Bert Keys confirmed the pipeline involved was a gas pipeline operating at 7bar and that it had been gouged and punctured. The incident had occurred outside a school, and the significant leak resulting had resulted in evacuation of the school, but had not ignited. The main had been stoppled and supply had been maintained. Bert agreed to investigate details of the machine which had caused the damage, and circulate for Members' information.

13.2.2 Incident Rates

Linton Haw noted that incident rates had reduced on Huntsman pipelines last year and asked if other Members were experiencing similar trends. Martin Price stated that BPA had been

proactive with regard to acting on near miss reporting and, as a result, had noted good reduction in high/medium category incidents. He also noted that the advantages had been influenced by a larger volume and longer time of consultations.

Dick Gray noted that currently Esso's experience was that the main perpetrators were land owners rather than Utilities. Mark Harrison stated that the level of data now available was such that this can be interrogated in different ways and could be used to indicate trends to show where and how incidents were occurring. Neil Jackson commented that the general trend in all fault and failure databases (predominantly UKOPA and EGIG) was reducing. Steve Wing stated that HSE will continue involvement in 3rd party initiatives and will look at all statistics for indications of where efforts should be directed.

13.2.3 Moss Morron Pipeline

Donal Cullen described a recent incident in which a cargo vessel had become beached in the River Tay. The 3,000 ton vessel has become stuck on a low tide, re-floated and then re-settled on the river bed over the Moss Morron NGL Pipeline. As a result of the incident, Harbour Masters responsible for the River Tay traffic had imposed a reduction on allowable vessel drafts. Donal noted that the river had been dredged recently but this had not affected the burial depth of the pipeline, and in fact had not significantly affected the profile of the river bed.

Donal also reported that a recent internal Shell safety assessment had stated that near misses had indicated that equipment inspections were in general not extensive or frequent enough and, in many cases, activities had been carried out without revising and updating risk assessments where conditions change. Failure to recognize changed conditions was now seen as a major potential cause of incidents. In addition, errors on permits had been noted, drawing attention to inconsistencies in the writing of the checking and countersigning of permits.

Finally, Roger Ellis commented that river crossing surveys allow detailed comparison of as-built to survey drawings, and recent surveys using 'xyz' profiles provided very good information for comparison.

14. Reports from Working Group Chairmen (by exception)

14.1 Fault Database Management Group

Roger Ellis updated Members as follows:

Roger Ellis reported that collection of fault data was ongoing and now totally web-based. Louise Chapman of Advantica had arranged two training sessions scheduled for 24th January and 16th February 2006. He noted there were still places available on these training courses and encouraged members to contact Louise. A major intention of this training was to provide information and obtain feedback on how the information was to be used.

Action: Members

Roger reported that he had been approached by the organisation responsible for the PARLOC database (which contains loss of containment data for offshore pipelines) for information on sharing of experience on collection, storage and manipulation of data and that he would advise on any developments at the next meeting.

Action: Roger Ellis

14.2 Infringement Working Group

Mark Harrison provided an update on the current position relating to the Infringement Working Group. The update is provided in UKOPA/06/0013. This shows details of infringements by activity. The database now includes more than 4,500 records updated to the second half of 2005, and continues to create value for UKOPA. The data is not yet validated, but the top twenty infringers have been identified and, whilst this list was not normalized (i.e. with respect to volume of activity), it had been very powerful in influencing and raising awareness. It was agreed and can be clearly seen that land owners are a difficult problem and required a different approach. A number of initiatives had been discussed, for example over-flight photographs, publishing articles in the Farming press, and liaising with the NFU and CLA organisations. Mark stressed that these links are to be followed up.

He referred to the Excavation Safety Seminar held on the 7th December 2005 jointly by UKOPA, HSE and National Grid and noted that it had been very well attended with good involvement and enthusiasm by all attendees on the day. A summary of the seminar including details of attendees and the proceedings are also covered in UKOPA/06/0013. It is intended to collate information collected at the seminar and to circulate to attendees who can use the information to prepare/update action plans for preventing damage to pipelines. It is proposed that a follow up event will be organised in due course.

Action: M Harrison

At Mark's invitation, Steve Wing offered additional comments. He stated that he had been very encouraged by the event and confirmed that the HSE would continue to support UKOPA in its aim to reduce pipeline interference. He also suggested that there is a need draw designers into the process with the aim of reducing construction problems and future interference issues. He will raise within the HSE and encourage the relevant personnel to develop an action plan on how to take the matter forward

Tony Stonehewer asked if, following discussions at the last meeting, HSE had received any invitations to visit sites where 3rd party activity was being investigated. Mark Harrison confirmed that not many invitations had been raised following this discussion, and it was agreed this was often due to the fact that such activities occurred at short notice and big plan jobs tended

not to fall into the category of concern as they are known about and are monitored on a regular basis. Steve Wing noted that in order to obtain best output, HSE had intended to carry out a joint visit with the HSE Inspector and the FOD Inspector as their responsibilities differed, but this is difficult to organise at short notice. Tony Stonehewer suggested that one approach may be for both Inspectors to put a day aside when surveillance activities were being carried out and to be prepared to visit any infringements along the surveyed route. It was agreed this approach would be useful and Members were asked to consider suitable dates and submit to HSE for consideration.

Action: Members

In the meantime Steve Wing confirmed that Jim Stancliffe was still open to offers as detailed in the notes of the last meeting - contact details as follows:

jim.stancliffe@hse.gsi.gov.uk.

In further discussion regarding in terms of the database, Roger Ellis noted that it may be worth identifying who is the best improver in order to demonstrate the information can provide positive as well as negative feedback. This is to be considered by the Infringement Working Group.

Action: Mark Harrison

14.3 Risk Assessment Working Group

In his report, Neil Jackson covered the current focus of the Group, progress since the last meeting and how the Code Supplements will apply in the event of a land use planning enquiry. Neil presented three slides which are included in UKOPA/06/0014. He noted with regard to technical progress that Rod had achieved good progress in discussions with HSE relating to consequence. Rod confirmed these discussions were drawing out technical details and allowing an understanding of how the HSE and industry models had been implemented and were being applied.

14.4 Working Group on Pipelines

Jane Haswell summarised the position relating to the Working Group on Pipelines and the progress achieved with the development of the Code Supplements. Most significant here was notification that the Working Group on Pipelines was to discontinue. This is because the ACDS Committee, to which it reports, is being discontinued; however the work program being undertaken and managed by the Working Group on Pipelines (and executed by the UKOPA Risk Assessment Working Group) will be continued. Arrangements to do this jointly with HSE have been agreed and a final meeting of the Working Group on Pipelines is to be arranged to formalize this. Slides summarizing this presentation are available on the website as UKOPA/06/0015.

15. Emergency Pipeline Repairs and Record of Pipeline Emergency Equipment and Spares (D. Cullen) (13)

15.1 Update

Donal Cullen reported that he had met with Cliff Chenery of the Pipelines Maintenance Centre, Ambergate and in addition he had met with the Consultant employed by Advantica to report on potential for the future operation of the Pipelines Maintenance Centre. In his meeting with Cliff, Donal had explained UKOPA's requirements and Cliff had confirmed he would provide a draft scope of service for consideration by UKOPA, together with indicative costs. Donal expected this would be available for discussion at the next meeting.

Action: Donal Cullen

16 Agenda/Presentations for the May Meeting

16.1 Actions Arising

16.2 Update and Presentations for the next Meeting (15.2)

Rod McConnell and Phill Jones were asked to make contact with the presenters to confirm availability.

Action completed and closed.

17. Onshore Pipelines – The Potential Enabler for Carbon Capture and Storage – Richard Vernon

Phil Brown welcomed Richard to the meeting and invited him to give his presentation.

Richard Vernon is working as an Independent Consultant for the East of England Energy Group which is undertaking part of the UK Government Energy Review. In this role he is looking at three specific areas:

i) The use of North Sea infrastructure for storage of carbon dioxide.

ii) Identify the UK onshore pipeline system and potential pipelines which may become available for use for the transportation of carbon dioxide.

iii) Making pipeline owners aware of the potential for offering under-utilised pipelines for application in this respect.

Richard explained that the work he was involved with was part of the UK Government Energy Review. This Review had indicated that up to 50% of the generating capacity in the UK may have to be replaced between 2015 and 2020. Gas reserves are reducing faster than predicted and,

as a result, gas fields are coming up for de-commissioning at a potential cost of between £15 - £19 billion. Fields in the southern North Sea are particularly suitable for storage of carbon dioxide as these are linked by a network of pipelines which are then subsequently linked to the onshore network. Carbon capture is maturing as a technology; it exists in America where capture has been proven. CO_2 storage is proven; it is currently used for enhanced oil recovery. CO_2 transportation is proven in that there are 3,000 kms of CO_2 pipeline in use in the USA. The key issue currently is that these three aspects, capture, storage and transportation, have not been linked in a single initiative.

In summary, this is now seen as a major issue in the UK and increasing focus is likely to be placed on this in the near future. Richard encouraged pipeline operators to consider use and future utilisation of their pipelines and be prepared to identify and offer low utilization pipelines for this use.

A copy of Richard's presentation is available on the website as UKOPA/06/0016.

The Chairman thanked Richard for his presentation.

18. Any Other Business

18.1 Feedback on the Website

Terry Williams offered feedback to UKOPA relating to use of the website. He considered the UKOPA meeting to be very useful and, prior to the meeting, he had reviewed the website to obtain information on UKOPA. He found this generally user-friendly although he noted that the high use of acronyms was difficult to follow. He also noted that information on Working Groups was, in some cases, out of date and may be repetitive, and that understanding of the membership structure was not clear.

The Chairman thanked Terry for his comments and stated that the points raised would be considered.

18.2 European Regulator Meeting

Steve Wing stated that HSE were hosting a European Regulator Meeting in June in Aberdeen. The second day of this meeting would involve an industrial visit and he would appreciate any ideas for programme and venue for the second day in the Aberdeen area.

Action: Members

18.3 Pipeline Safety Seminar

Dick Gray noted that the Pipeline Safety Seminar held in Wilton last September was to be repeated on the 21st March 2006 at PIG Headquarters in London. Phil Brown confirmed that UKOPA was keen to support this event.

18.4 Chairman of UKOPA

Phil Brown confirmed that this would be his last meeting as Chairman of the Association, and that Neil Jackson would Chair the meetings in May and the Management Council meeting in September prior to handover to the next Chairman. He expressed his thanks to Members for their support over the period and stated that the experience had been both enjoyable and rewarding.

In response Roger Ellis thanked Phil for his commitment and contribution both as a Member and Chairman, and wished him success for the future.

18.5 Lindsay Boswell

Phil Brown noted that Lindsay Boswell was moving positions and would cease to be the BP representative on UKOPA BP. Lindsay confirmed he would work to ensure a smooth transition, and Phil thanked him for his contribution and support during his period of Membership.

18.6 Work in Progress

Jane Haswell noted that she would circulate the 2005 work-in-progress report as a draft, with specific request for focused input.

Action: Jane Haswell

18.7 UNECE (United Nations Economic Commission for Europe) Workshop

Tony Stonehewer advised Members a UNECE Workshop on gas transmission pipeline risk assessments for land use planning is to be held on the 8th/9th March 2006. He agreed to circulate information to Members.

Action: Tony Stonehewer

18.8 Newcastle University Pipeline MSc

Rod McConnell reported that the UKOPA prize for the best student from the Newcastle University Pipeline MSc had been presented on the 8th December 2005. Two students received the presentation - Andre Goncalves and Patricia Seevam, and photographs of the presentations have been posted on the UKOPA website.

18.9 Feedback on the Meeting

In response to a request on the structure and content of the meeting from the Chairman, a number of Members stated that the meeting had been interesting, informative and relevant. It was noted that changes had taken place as a result of feedback from Members and that these changes were positive and constructive.

18.10 Total UK Ltd.

Finally the Chairman expressed thanks to Total UK for the hosting of the meeting and the hospitality offered to Members. This vote of thanks was fully supported.

19. Dates and Venues of Future Meetings.

17th/18th May 2006 – Esso Petroleum have kindly offered to host this meeting and details will be confirmed in due course.

20th/21st September 2006 – The Chairman noted that an offer had been received to hold the meeting at Newcastle University and that a presentation would be made on the University's Centre of Excellence, and he recommended that the offer should be taken up. The recommendation was supported.

Action: Chairman and Secretary.

Signed: (Neil Jackson) – Chairman.

Date: