



National Energy Board
Workshop
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de l'Office national de l'énergie



NEB Workshop Proceedings

Actes de l'Atelier de l'ONÉ

Canada

NEB Workshop Proceedings

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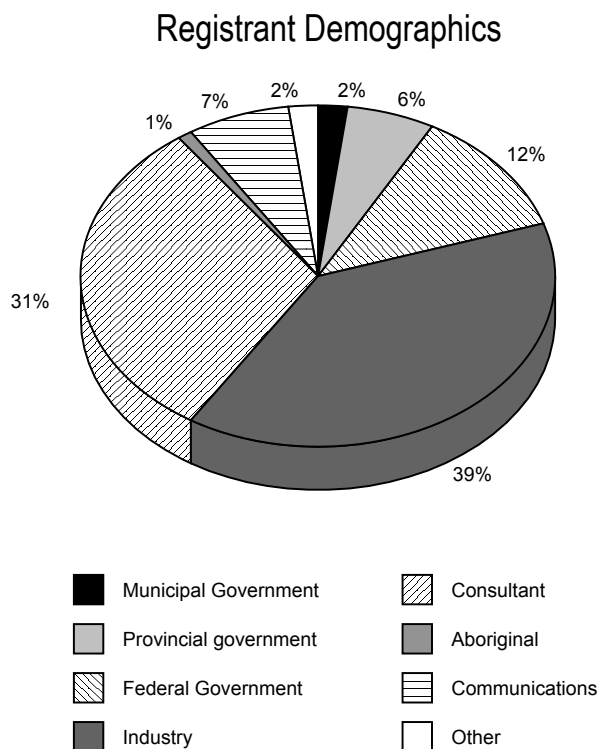
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Executive Summary

Ken Paulson, 2003 NEB Workshop Chair

The 2003 NEB Workshop was held December 2-4, 2003 at the Telus Convention Centre in Calgary, Alberta, Canada. The workshop attracted 367 registrants representing more than 85 organizations including representatives from regulated and non-regulated industry, municipal, provincial and federal agencies, consultants and aboriginal groups. The pie chart below provides a graphical depiction of registrant demographics.



In June 2002, the NEB hosted a scaled-down workshop to discuss initiatives underway within the Operations Business Unit. The intent of this event was to reduce the amount of time and effort spent on consultation by bringing interested parties together at one time and in one forum where they would have an opportunity to speak directly with NEB staff and other stakeholders. This event was very successful and feedback from participants was highly supportive of continued periodic workshops which could provide focused forums for discussion for even broader Board initiatives.

In planning this workshop, the organizers sought out participation from across the NEB. In doing so, the group developed four goals. These were:

To Communicate

The workshop should be structured such that NEB staff and representatives from targeted attendee stakeholder groups interact as much as possible.

To Refine Initiatives

There must be deliverables arising from the interaction, including proceedings or summary reports, as well as revisions and refinements to the regulatory initiatives that form the basis for consultation.

To Consult

The workshop should be structured so that discussions between NEB staff and representatives from targeted attendee stakeholder groups are meaningful and constructive.

To Inform

The workshop should include sessions designed to improve working relationships by explaining NEB expectations, processes and procedures.

Over the course of the three-day workshop, participants were able to attend a wide variety of sessions on topics

ranging from the investigative process employed by the Transportation Safety Board to an overview of the contents of the latest draft of the *Filing Manual* which will eventually replace the *Guidelines for Filing Requirements*. In total, 21 sessions were held.

Feedback from participants indicates that the four goals were achieved during the workshop. Ninety-six percent of participants indicated they were satisfied with the workshop and 82% plan to attend the next workshop, planned for 2005.

Other comments received indicate that while the workshop itself was worthwhile, the Board needs to use the information and feedback and demonstrate that the investment made in the workshop by participants was worthwhile. Wherever practical, the Board (and others) should reference these proceedings in the development and refinement of new initiatives.

Planning is underway for the 2005 workshop. If you have any suggestions on how this event can be even more successful than the 2003 workshop, please contact the 2005 Workshop Co-Chairs Robert LeMay at (403) 299-3187 or Linda Postlewaite at (403) 299-2756.

Thank you for your interest and assistance in making the 2003 workshop the success it has been. We look forward to the 2005 NEB Workshop and expect that the success of this event will continue to grow.

Plenary Session
The Path to Smart Regulation
Ken Vollman, Chairman, NEB

Mr. Vollman shared some of the NEB's high-level strategies. He indicated that the Board is focused on goal-oriented practices, as opposed to 'goal-based' or 'prescriptive' approaches. The Board views a goal-oriented approach as a hybrid between the latter two approaches. This is a key element of the 'Smart Regulation' initiative that was introduced in September 2002. Smart regulation also promotes clear and predictable regulatory processes and decisions, as well as reduced regulatory burden overall.

Mr. Vollman discussed the Board's Audit Program, the purpose of which is to ensure that regulated companies have the appropriate management systems in place so that NEB goals are met. Other topics addressed were initiatives that the NEB has undertaken to improve the clarity of its regulatory processes, including a *Filing Manual* with revised *Guidelines for Filing Requirements*. Cooperation and partnering, as well as promoting public awareness and understanding, were also identified as part of the Smart Regulation initiative. Safety and environmental goals, statistics and processes were reviewed.

A copy of Mr. Vollman's speech is included in the Appendix.

Abandonment, Deactivation and Decommissioning

Kent Lien and Scott Gedak

The speaker noted that there was a problem, a regulatory gap, between abandonment and deactivation of a pipeline. Abandonment involves the permanent cessation of operation of a pipeline and discontinuance of service, while deactivation is only a temporary cessation of service. The speaker noted that there is a need to define a new term for a permanent cessation of operation of a pipeline that does not involve discontinuance of service. This new term would be called decommissioning and a new decommissioning section is proposed to be added to the *Onshore Pipeline Regulations* (OPR) and *Processing Plant Regulations* (PPR). Application for decommissioning would need to be made under the OPR or PPR. There is also the need also to clarify that abandonment does result in a discontinuance of service.

The speaker presented the following definitions for discussion:

Abandonment – Permanent cessation of operation of a pipeline that results in the discontinuance of service

Decommissioning – Permanent cessation of operation of a pipeline without discontinuance of service. This might include modifications involving removing or disconnecting components – but could also apply to an entire pipeline, as well. For example, if there were two looped lines providing the same service and one is shut down and the second line is still providing service, does the line closure involve discontinuance of service or not?

Deactivation – The existing definition (temporary removal from service), involving an actual or anticipated 12-month deactivation period, remains unchanged.

The speaker noted that the proposed decommissioning definition was too broad, since it would capture minor projects for which regulatory oversight would not be necessary. Therefore, an exemption order would be needed to exclude some activities from the requirement

to file an application. The speaker wanted input from the audience about what activities should qualify for an exemption order.

To avoid the problem of capturing projects for which no regulatory oversight is necessary, the speaker noted that there had been a suggestion from industry to use a more restrictive definition for pipeline like that found in CSA Z662. However, for legal reasons, the NEB cannot do that. Another possibility might be to limit applications to where there is a loss of functionality to the system. However, there may be circumstances where there is no loss of functionality, but still other impacts, e.g., environmental.

An audience member noted that decommissioning is included under the definition of project under the *Canadian Environmental Assessment Act* (CEAA) and thus, he wondered whether the proposed exemptions would be illegal under the present CEAA. The speaker indicated that, in his opinion, exemptions would not be illegal since the proposed amendments to the OPR and PPR would not be CEAA Law List triggers.

Another audience member asked if abandonment would require a public hearing. The speaker indicated that under the Act, a hearing is required. However, it does not have to be an oral hearing if there is no interest by the public. The hearing can be handled without an oral public process.

The speaker noted that the key distinction between abandonment and decommissioning is “discontinuance of service”. There was a discussion among the audience about the possible definition for the term “service”. Service was defined as “*the ability to either physically transport hydrocarbons between two distinct geographic locations – or to store or process hydrocarbons.*”

Audience comments on ‘service’ definition:

- The ‘ability’ may be there, but the desire may not be. There may be some problems with that. You need willingness as well as ability. (NEB legal counsel noted that if an oil pipeline has the ability, it has to provide service, while there is no such obligation for gas pipelines.) If you take out the word ‘ability’ from the definition, it won’t matter.
- Essential elements are permanency plus contractual obligation. These need to be addressed. Could the word ‘required’ be added in front of the word ‘ability’?
- ‘Physically transport’ could mean railcars; need to say pipeline.
- What if a multiple customer site loses one customer, would that be considered abandonment?
- Why ‘between two distinct geographic locations’? Why is that needed? Transportation implies that.
- What does ‘distinct’ mean – 20 metres or 20 kilometres?

To stimulate discussion, the speaker also presented a definition for “discontinuance of service”, as follows:
“Includes the cessation of ability to provide transportation, storage or processing of hydrocarbons, meet existing contracts for the use of a pipeline system, meet the potential needs of persons who have contracted in the past for transportation, storage, processing or deliveries from a pipeline system.”

Audience comments on “discontinuance of service” definition:

- What does ‘includes’ mean? Are there other elements not mentioned? The speaker replied that the definitions would be included in the Guidance Notes, not in the actual regulation and that therefore the wording could be a little looser. The goal would be to provide clarity. The wording being presented was intended to stimulate discussion.
- It was noted that the original definition included the term ‘discontinuance of service to end users’. Why was ‘end users’ dropped? The speaker replied that there needed to be a definition for ‘end user’ and asked whether the term should be put back in. NEB legal counsel asked who should be defined as the end user. Is it the shipper or the actual user of the commodity (customer)? There was no consensus from the audience.
- What about a long-term temporary deactivation – longer than the 12-month period mentioned in the definition? How would that be handled?

- There was some concern about the obligation to meet ‘potential needs’.
- Anything that does not meet the definition for service could be considered a discontinuance.

It was also suggested that abandonment could be defined as completely scrapping the entire pipeline system. That would narrow the field for the requirement for applications. Then everything else could be classified as decommissioning and the NEB could decide if a hearing is needed or not. Another person suggested that decommissioning could just refer to the curtailment or reduction of service.

The speaker then sought suggestions for activities that should qualify for an exemption order. Does the order meet its intended purpose? Does it capture projects for which applications should not be necessary and will the Board review what should be reviewed? Is there a need for some way to report projects that fall under exemption order? A draft for discussion was presented.

Audience comments on exemption order draft:

- Decommissioning of a compressor or pump station might not result in loss of service. If there were no public or safety issues, why wouldn’t it be exempt? The speaker responded that this might involve a situation where the company might sell the land and the Board would like to be aware of these situations.
- What if a single compressor unit within a station is decommissioned?
- Would any spill be reportable anyway?
- What is the potential difference between public and private lease?
- If you left a piece of pipeline in the ground, then you would not be exempt. Landowners would want to know that and so you would need to make an application. But that is covered in the easement order, so why does the landowner need to be informed when they already know. NEB legal counsel noted that the NEB no longer has jurisdiction once the pipe is inoperable (e.g. filled with grout). The NEB only regulates lines capable of transporting. The landowner could not come to the Board to complain about a decommissioned piece of pipeline.
- What if you’re moving some pipe underground on land you own? That could be exempted. It is for the Board to decide, depending on public considerations.

- Why are sulphur compounds exempted? The speaker noted that the exemption order does not address commodity pipelines.
- No increase in storage or disposal of toxic substances (4.1.2) is indicated. Then would you need to apply if you have PCBs and storage will be increased? The speaker indicated that this point may not be necessary.
- A new definition of 'material effect on tolls' is needed that would identify a quantity (2.1).
- There may be switchgear equipment removed near a water body and so it was suggested that the distance guideline of 30 metres be eliminated or changed (4.1.3).
- It was suggested that it is not necessary to have a year-end reporting requirement and that the activities could be subject to audit.

The speaker noted that there will be additional opportunities for comment in the new year, as meetings with industry will be occurring then.

Aboriginal Issues

Chantal Simons, Bob Mahnic and Margaret McQuiston

This session provided an opportunity for participants to dialogue on Aboriginal issues. NEB efforts over the past year to engage Aboriginal groups and to clarify expectations of industry with regard to their own consultations with Aboriginal groups were shared. NEB staff also shared feedback obtained through recent dialogue with Aboriginal groups and certain companies.

The present context for Aboriginal consultation involves three main drivers:

1. Legislation and case law;
2. Land claims and self-government;
3. Changing expectations of the public and Aboriginal groups who want more involvement in decision-making.

Up until now, Aboriginal issues have been dealt with on a case-by-case basis. The NEB received the following feedback from Aboriginal communities:

- Aboriginal communities want to be involved, but say they lack capacity, knowledge and resources.
- Funding (for experts, attending hearing, internal capacity, etc.) is a big concern.
- The timelines of communities should be respected.
- NEB processes are intimidating.
- NEB could sponsor joint workshops, etc.

From industry's perspective, relationships are key. As well, clarification of the NEB's expectations is needed.

The NEB reported on three initiatives that will help address Aboriginal issues:

1. The new Filing Manual (GFR)

The revised *Filing Manual* addresses Aboriginal issues specifically and provides guidance on who to consult and how to gather traditional/local knowledge.

2. The NEB's Aboriginal Engagement initiative

The NEB's Aboriginal engagement initiative will enhance internal capacity, promote dialogue and remove barriers. Among a variety of tools, a database and cross-cultural training program are being developed.

3. The federal government's Crown consultation initiative

The federal Crown consultation initiative was initiated in response to a need for a coordinated approach within federal government. A discussion paper on an approach to Crown consultation is forthcoming.

Some provincial governments, such as Alberta, have embarked on their own Aboriginal consultation initiatives. An audience member requested clarification about the role of the provincial Crown in the federal Aboriginal consultation initiative. Potential overlap will need to be considered. Input into what should be the provincial government role in the federal Crown strategy was requested by Board staff.

A Fort McKay band member provided some suggestions for industry and regulators on how to consult with Aboriginal communities:

- The grassroots people (community members) must be consulted. They must understand what the project is about. Often it is only the leaders or governing bodies being consulted and the information is not always getting down to the community level.
- Ensure consultation with local entrepreneurs. They are leaders and have a lot of respect with the grassroots public.
- Community relationships are key to success.
- Consultation on environmental issues and land disturbances should be both clear and in-depth.
- Industry must be upfront at the beginning of consultation. There should be Aboriginal involvement right from day one to the end of the project.
- Industry must understand community issues – social, economic, traditional – as well as understand the infrastructure of the community, especially in the north.
- Visual presence in the community is important.

An audience member asked if the database of community profiles being developed by the NEB would be available outside the Board. The speaker replied that the purpose of the database was just to increase the Board's own understanding. However, the information may be made public eventually.

NEB staff were asked how the Board is being affected by changing expectations regarding participatory decision-making, and they replied that the Board is focusing on making the hearing process less intimidating and more open.

Community involvement and education were the focus of another discussion. A comment from the floor indicated that in the Northern Territories there are significant capacity building issues – people there especially need to be educated and informed. It was also noted that resources in small communities are limited.

A member of the audience indicated that the conventional three-ring binder used by industry to present project information to local communities is too big and too overwhelming. It was suggested that there are ways to present information other than binders, e.g., meetings and presentations. Companies should

have a physical presence in the communities when they communicate with residents. A First Nations representative indicated the more visual the information, the better, noting that First Nations people may not have a high education level. Information must be presented in a way that people can ask questions. Having meetings translated into Aboriginal languages was another suggestion. Upfront planning should ensure that the company has a lot of time in the community – at least a day or two, rather than attending a meeting and flying out the same day. An extended period of time will promote dialogue and allow elders the time to consider the project and ask questions.

One audience member wondered if the federal Crown consultation process would only apply south of 60 degrees latitude. It was indicated that a model for the south is being developed now – and that the needs of the north – with the Mackenzie pipeline – are only now being identified. Further planning work on the north will be undertaken in 2004.

The following future issues were identified by NEB staff:

- Changing environment due to case law, land claims and treaty negotiations
- New standards and guidelines
- Consultation issues, such as Aboriginal traditional knowledge (ATK).

ATK must be defined so industry understands what type of information it must collect. Each community will have its own requirements. Other issues include how information will be accessed, how it will be used and how confidentiality will be protected.

Another challenge is to enhance Aboriginal capacity – there is a real need for this. Technical expertise is especially needed. Consultation burnout for small communities is also an issue. Construction operation, and training and employment are additional challenges.

The audience was asked what the NEB should be focusing on over the next 18 months. The following 'wish list' was created:

- Name an ambassador (local Aboriginal representative) for each project to serve as liaison between industry and the community.
- Explain the role of various governments – to industry as well as to the community.
- Communicate local treaty and land claim protocol.

- Develop a protocol on how to work with communities, building on what has been started.
- Focus on eliminating inconsistencies between timeframes and the need to consult – competing demands.
- Build capacity – how can NEB help there, and not expect industry to do it all?
- NEB could act as a coordinator with other government departments, e.g., HRDC, on consultation. People in government need to be talking to each other.
- ADR could be used to bring issues to the community.
- Develop principles for benefit agreements through a trilateral process involving Aboriginal people, industry and the NEB.
- Ensure consistency north and south of 60 degrees. This is very important.
- Look at other processes, e.g., *Canadian Environmental Assessment Act*, regarding traditional knowledge. Don't reinvent the wheel.
- NEB must make some hard decisions when a project is being held up by one individual.
- Ensure alignment with all provincial agencies.
- Regulators need to ensure strategies are regularly communicated to the public via, for example, public information bulletins, a national newspaper, etc., and give the public an opportunity to respond if they wish.
- The NEB must establish and sustain trust with all parties – especially First Nations people.
- Are there sufficient resources and talent at the NEB? Does the NEB have the capacity to deal with all these issues?
- Some criteria should be developed to give companies guidance in determining what to do with ATK and how to determine if they have gathered enough ATK. Also criteria are needed to determine whether there has been sufficient consultation. What about cumulative effects assessment? What will you do with results of consultation? How will you provide feedback on the results? Criteria for all of these would be helpful.

Feedback sheets filled out after the session included the following additional suggestions:

- Develop a protocol for how industry should approach an Aboriginal community and its leadership.
- Clarify socio-economic impacts and benefits to the community.
- Address long-term and cumulative effects. How can and will the NEB deal with this requirement under CEAA and determine when there is enough information?
- Consultation is much more than Section 35.
- Develop a database of bilateral and trilateral agreements that have been signed (remove information pertaining to company names and project specifics). These samples could be used as a guide to industry and First Nations as to the level of agreement that is reached in the past.
- Is there alignment (consistency) with the tools being used by industry to address First Nations issues?
- Is industry communicating enough and regularly with each other?
- This meeting is a step in the right direction. The feedback you have received has helped and needs to be incorporated.
- Informal representation and presentations by the NEB and industry are a must.
- Developing a south of 60 degrees plan before a north of 60 degrees plan can cause a 'sour feeling' among northerners.
- Develop some principles for benefit agreements.

Appropriate Dispute Resolution (ADR)

Karla Reesor and Lorna Patterson

The Board's objective with respect to ADR is to lead and support innovative and effective approaches for managing issues and resolving conflict as an addition to the current regulatory processes. This session provided an overview of the Board's ADR Guidelines, described some of the current situations where they are being applied, and discussed how ADR principles are used to promote collaborative interest-based outcomes between parties.

The speaker noted that there are limited choices available to deal with conflict:

1. Power (intimidation) – someone inevitably loses.
2. Rights approach (appeals to courts, NEB, etc.) – there is generally a loser here, too.
3. Interest-based approach – parties retain control of process and resolution and attempt to reconcile interests – more win-win.
4. Avoidance – Avoiding the issue will allow it to fester and could also result in lost opportunities.

ADR supports an interest-based approach. In this process, the interests of each party and the issues that need to be addressed are identified first. ADR offers a continuum of tools to deal with the issues, starting with negotiation, a facilitated process and mediation working through to litigation on the other end of the spectrum. Focusing on negotiation and mediation is often cheaper and quicker; it keeps information confidential; and people are more motivated to move toward resolution because it is a voluntary process. It is also easier to maintain and improve relationships, compared to litigation and other mandatory resolution tools.

The NEB's ADR guidelines released in July 2003 were reviewed. Some principles of these guidelines are:

- Significant dialogue and planning should take place upfront about how parties want to deal with the issue.
- Parties should be motivated and come to the table willingly. The process is voluntary.
- The process should be timely. ADR should not delay the time it takes to reach a decision.
- The process should be fair – parties retain the right to a regulatory process and they should be able to opt out of an ADR process if they choose.
- Flexible – the process should be designed WITH the parties -- not FOR them.

Nearly all regulators in North America have some kind of ADR program. The Alberta Energy and Utilities Board (EUB) has a more extensive program than the NEB at this point, with a large number of staff trained in ADR techniques. The EUB program was reviewed and statistics presented.

The NEB's ADR process was then described. The process starts with identifying a potential ADR situation – this could be by a Board member, Board staff, a company or a landowner. Then an assessment takes place to determine if the situation is suitable for ADR, and if the parties are willing to consider it. Then the parties come together with a facilitator (could be Board staff) to identify their concerns and plan a process.

Offering some tips to promote the successful resolution of issues, the speaker suggested that industry should increase their upfront communication time as well as consider past history related to the parties. It may be easier for a company compared to a landowner to let go of the past. Companies should disclose their own interest and learn how to tell their side of the story in a different way, e.g., expressing their hopes, concerns and expectations. The NEB speaker also noted that a deadline was suggested to motivate the parties to resolve issues quickly.

A member of the audience asked about the similarities and differences between the NEB and EUB ADR processes. The processes are similar, although the EUB is more advanced in the development and implementation of its program.

The NEB was also asked whether it is planning to track statistics like the EUB. Board staff indicated that they will track results. However, the Board's volume of complaints is much smaller than the EUB's, implying that the volume is too small for any meaningful trending. It was noted that the beginning of a mechanism to track results is in place. The audience was asked for feedback on criteria to gauge results.

An audience member suggested that ADR be used in negotiation with Aboriginal people, and asked whether the NEB could assist in training local communities in ADR principles. The speaker indicated that the NEB would consider this possibility and requested direct discussion with those interested. Another questioner asked whether the ADR process has been used with Aboriginal people by the EUB. Board staff indicated that to their knowledge, this has not yet happened.

The speaker was asked if Board facilitators conduct ADR meetings onsite and responded that the facilitators have been able to meet with landowners in their community. Preliminary meetings have been conducted face-to-face or over the phone.

An issue was raised about how to deal with compensation in the ADR process, since compensation is not part of the NEB's mandate. The speaker indicated that Board staff could still facilitate these types of discussions. There was some discussion in the audience about whether this was appropriate or not and how confidentiality issues might be addressed. For example, the Board facilitator could leave the room if compensation discussions begin. Some stakeholders expressed a benefit in having Board staff available as facilitators on compensation issues.

One audience member wondered whether ADR would be more effective or useful for applications for new facilities compared to operations, since there are already clear, auditable and inspectable requirements for operating pipelines. Board staff indicated that yes, there may be more room for negotiation in an application phase.

The problem of landowners encroaching on the right-of-way was identified as a difficult one, since it requires the company taking landowners to court. It was requested that the Board look for ways to mediate these kinds of issues or develop a process so that the legal department need not be involved. An NEB field inspector agreed that such a process would be desirable.

Audit Program (2 sessions)

Lawrence Ator

The NEB audit program is intended to put into practice goal-oriented regulation. At the first session there were presentations from the NEB Audit Team and the Canadian Energy Pipeline Association (CEPA) on their respective views on the successes and shortcomings from the first three years of the NEB audit program. At the second session, the floor was opened up for a discussion of the challenges and possible solutions.

The audit process and all its steps were described. The audit program involves two levels of assessment – adequacy (capable of protecting) and effectiveness (actually protecting). The audit provides companies with the opportunity to demonstrate that their programs are both adequate and effective. Findings identify areas of non-compliance with regulations as well as non-conformance with the company's own management system. 'Recommendations' identify potential future issues and do not indicate a non-compliance situation. The speaker noted that the document, 'Expected Elements', is no longer being used by the auditors. There is, however, an Audit Report Template, a blank audit report, to help ensure consistency. Guidance Notes provide assistance to industry in developing the required programs.

CEPA provided feedback on the NEB Audit Program from a number of its members. It was noted that Terasen has already undergone five regulatory audits on its pipeline so far this year. The following issues identified by CEPA were discussed with the audience and Board staff.

Follow-up process

- Corrective action plans are quite significant, sometimes involving rewriting or developing an entire program. Industry asked if a whole other audit is needed as the follow-up, something less – or would the corrective action plan be reviewed at next audit? Industry indicated that they didn't want another separate audit to review the corrective action plans.
- One industry member noted that as they get corrective action plan programs developed, they send them to the same auditors. It was felt to be important to have the same auditors involved in the follow-up. Otherwise new auditors would have to start at 'Square One'.
- Another industry member indicated that his company undertook an internal audit to ensure they had good corrective action plans.
- Board staff noted that when companies send in their corrective action plans they include information such as how the plans will be implemented, training, dates, etc. There may need to be more communication as to the expected structure in the action plan.
- Industry suggested that the Board communicate in writing what is required as soon as possible.
- The speaker noted that, for some of the corrective actions, it will be the role of inspectors to determine how things are working once the corrective action plan is implemented. There should be a close working relationship with the inspector and the audit team. Inspection should be fully integrated into the process.

Unclear language in the findings

- There was significant discussion about the way reports are worded. Board staff recognized that there are some valid concerns.
- The language used by the auditors does not indicate the degree of severity or extent of a problem.
- Whole programs are being condemned where a single element is the problem. It is better to identify gaps than to make generalized statements.
- There has been a shift by auditors to program-based findings, as opposed to individual findings. Industry indicated it might prefer separate findings.
- Industry noted that there is a difference between 'generic findings' and 'group findings' (subfindings) and that it is ok to have group findings but not generic findings. More specific findings keep the context intact and help focus the corrective action plans.
- Industry also commented that the generic findings cover a number of issues that are embedded in the Audit Report. There should be a separate finding per issue.
- There was concern that wording such as "The audit team could not verify..." is too vague. It is better to be more direct and to say the program is deficient in specific areas.
- Industry also commented that the relationship between inspection and audit still needs clarification.
- It was also suggested that an overview or executive summary up front would be helpful.

Transparency at closeout meetings

- Industry indicated that it sometimes receives findings at the final closeout meeting with no advance notice. New findings and/or recommendations sometimes show up only in the report. There needs to be another step in the process. There needs to be the opportunity to dispute new findings or recommendations.
- The auditors indicated that they themselves may not be responsible for adding new findings in the draft report. The Board can strike a finding if they wish or change, drop, or add one. Auditors only provide advice to the Board.

- Some industry representatives noticed a discrepancy between the type of language used in the daily closeout meetings (mild) compared to the final closeout meeting (harsh).
- The speaker indicated that new recommendations (recommendations do not indicate non-compliance) may be added by the auditors in the draft report. If new findings are added, then perhaps an extended review period should be provided.
- Industry believed it did not have the opportunity to dispute findings in the draft report. There was an extensive discussion about this. The speaker confirmed that companies could dispute the findings, not just make editorial comments. The Board was encouraged to communicate this to industry.

Basis for auditors' expectations

- Industry wanted more consistency with audits and an open dialogue about the acceptability of alternative programs. Some industry representatives felt that auditors were focusing too much on whether there is an ISO program in place and that there should be more reasonable expectations for environmental systems than ISO 14000.
- There was also a concern that auditors seemed to expect fully mature management systems rather than less formal programs.
- The speaker noted that auditors should be auditing to the regulations only, not ISO or Guidance Notes, for example. The speaker also noted that with goal-oriented regulation, it is difficult to have certainty about what to do. Companies want both flexibility and certainty. As a regulator it is difficult to provide both. The speaker asked if industry wants more documentation. However, all agreed that it is a good thing that the Expected Elements document has been eliminated.
- Industry doesn't want more prescription. Industry should provide programs and auditors should determine if regulations are being met. An industry member noted that there is good detail in the Guidance Notes, but there are also prescriptive elements there, as well. For example, reference to emergency planning zones is in the Guidance Notes, but not in the regulations. The speaker replied that Section 47 of the regulations contains reference to the need to anticipate and mitigate emergency situations. That is what the auditors should be using as part of their criteria.

- The speaker agreed that Guidance Notes are a bit of a compromise. They provide some guidance but they are not intended to be used as criteria for findings. Industry should indicate to the lead auditor if they feel Guidance Notes are being used in a prescriptive way.
- An industry representative commented that it is a balancing act, that Guidance Notes give flexibility since the regulations are not specific enough. Guidance Notes explain further what is required. His firm was reasonably satisfied with how their audit went.

Documentation requirements

- There should be a standard list, according to industry. A process to review the documents is also needed.

Breach of confidentiality concerns

- An industry representative reported that auditors used other company names and methods in discussion when his company was undergoing an audit. There was a concern about the confidentiality of this kind of information. The speaker agreed that this should not happen and will take steps to ensure that it does not happen in the future.
- There was concern that the audit team often takes documents away with them. This raises legal issues. The company in question made an informal agreement with the auditors that sensitive documents would be reviewed onsite. It was recommended that a process to address this issue be developed.

Scheduling and timelines

- Industry noted that the audit schedule is not confirmed with sufficient lead time. It requires a lot of preparatory work to demonstrate adequacy and effectiveness. Industry also needs schedules a month to six weeks in advance in order to book appointments with key personnel. Now it is sometimes only days in advance. An auditor indicated that in order to confirm the schedule, they need pre-audit information sooner. The speaker indicated that this issue would be fairly easy to address.
- Industry indicated that draft audit reports sometimes took 100 days. Final reports were provided 90 days later. The speaker agreed that long delays in draft and final audit reports are

unacceptable. This is an internal issue that will be addressed by the NEB.

- The speaker described the internal process for developing the draft report:
 - Auditors write their sections in two weeks.
 - Sections go to the lead auditor.
 - Then the draft goes through a quality control process.
 - Finally the report is submitted the following Monday for that week's board meeting for review.
- This process takes at least a month but with current workloads, additional time is needed. Two months might be a reasonable expectation for the draft report. It should not be any longer than that. Industry indicated that the NEB should be consistent in doing what they say they will do, i.e., pick a timeline and keep to it.
- There was also concern that two weeks to respond to the draft report is not enough time. The NEB could consider lengthening the response time, but it will then take longer to get the final report produced. The speaker indicated that ten working days is normal for these types of processes.
- There was a request for clarification on timelines for corrective action plans. It takes a lot of effort to coordinate the development of such plans. Currently industry has only 30 days to file these plans. It was noted that the final report's cover letter provides an actual date for the corrective action plan to be submitted. Board staff are aware that not all problems will be solved by that date. There will be additional deadlines for implementing plans and follow-up will take place after that. An audience member noted that 30 days should be sufficient if development of the corrective action plans begins immediately following the final closeout meeting. The speaker added that auditors will provide information at the closeout meeting about when the report will be ready.
- An industry representative indicated that perhaps deadlines for corrective action plans should be based on the size of audit, and the number and severity of findings so that the schedule for a small firm with fewer issues might be shorter than that of a larger firm with perhaps more issues. The speaker indicated that the company generally identifies dates in its corrective action plan and the NEB approves them.

Auditor expertise

- Industry expressed concern that some auditors lack training or information about the company and its facilities. A minimum experience training level should be identified. Auditors should learn about the facilities prior to the audit.
- The speaker noted that auditors can audit unfamiliar issues if regulation is prescriptive. However, in goal-oriented regulation, auditors must be highly experienced and knowledgeable. Otherwise, it takes a lot of time to report. Lots of internal discussion among the auditors is required. The speaker indicated that the Board is developing a program to qualify auditors.
- Industry also commented that it had to spend time educating auditors about their facilities. Auditors were not aware, for example, what the pipeline transports, where it goes, etc. This was perceived as another burden on the company.
- The speaker indicated that the Board has to regulate close to 100 companies and that it is not realistic for auditors to know about each of them. Possibly the pre-audit stage could address this issue. The pre-audit meeting is the ideal time to learn about the company and to learn what the auditors will do. The company can also learn what documentation is required. Perhaps this stage should involve a day-long meeting.

Communication with auditors

- There was a common concern about the difficulty in accessing auditors before, during and after the audit. An improved process should be developed.
- The speaker agreed that any communication difficulty with auditors will be addressed.

Expanding learnings from the findings

- Industry indicated that it wants to be informed of common themes arising from the audits. The speaker indicated that no formal communication has been done in this area, although there has been some informal communication.
- Industry suggested that findings could be grouped together to determine benchmarks and typical findings. The Board should provide some statistics, but take care to maintain confidentiality.

The audience was asked if there were additional issues that should be discussed. Also, the speaker wanted to know if the audit process is effectively achieving the Board's goals.

Industry wanted to know if 'recommendations' (non-mandatory suggestions) might be areas of focus in the company's next audit. The speaker indicated that yes, a subsequent audit would check to see if there was further deterioration in those issues previously identified.

Concern was also raised about 'focused' audits. While these types of audits were driven by security and safety issues resulting from 9/11, there is so much overlap with other areas that the focused audit is not generally practical and is not a wise use of resources. The speaker indicated that there will not be strong emphasis on focused audits, although the integration process may possibly require some.

It was noted that all audits can do is measure compliance against a set of written requirements. Those requirements need to be set out. The Board might need to look at the language of the regulations. The regulations have to be properly written. That may be why auditors might go beyond compliance.

The audience was asked who has been audited and if the audit provided value. Five individuals indicated their firms had been audited. One individual indicated that the threat of an audit was as valuable as the actual audit – the audit itself is anti-climactic.

Another individual commented that it was not just the threat. With the audit, companies are being forced to look at themselves. Without the audit, they may not take the time to do that. There was also a suggestion for the NEB to consider a survey of firms that have been audited to ask if there have been improvements in safety, timeliness, performance metrics, etc. The speaker indicated that surveys are already being used. All companies except for one or two have been surveyed.

Compliance Strategies at the NEB

Paul Trudel

The speaker outlined the NEB's compliance strategy, explaining its goal to ensure that pipelines are safe and built in an environmentally acceptable manner. The compliance strategy covers the design, construction and operation of any pipeline project.

There are controls in place for each of the three phases; for example, in the operation phase, controls include pre-operating conditions, post-construction monitoring reports, incident reporting and emergency response manuals. The NEB's responsibility during this phase is facility and post-construction inspections, incident investigation, monitoring integrity issues, and evaluating emergency response program (ERP) implementation.

The speaker focused on how the Board is working to integrate the audit function into the compliance strategy by using the results of inspections and other evaluations to focus audits, and vice-versa.

The Board conducts audits and inspections to protect safety and the environment by ensuring companies are following codes and regulations, meeting their own commitments to the NEB, and having adequate and effective management practices. An inspection is considered for projects where:

- The company is new to the NEB and is unfamiliar with NEB regulations and procedures;
- The company has poor compliance history;
- There have been specific safety or environmental concerns identified in the application phases;
- There are landowner or other public concerns;
- There are conditions, commitments or undertakings that require an inspection for follow-up; or
- There are NEB staff concerns.

The speaker also outlined the Board's criteria for assigning an Operations Project Manager to a specific project (similar to the inspection criteria above) and also the criteria considered for Leave to Open (LTO) exemptions. Those include the compliance history of the company as well as its current level of compliance, location of the pipeline or pipeline facility (e.g., near a populated area or in a pristine environment), and unconventional designs and/or construction.

The speaker stressed that the Board's approach to enforcement – which has been the same since 1989 – is to promote voluntary compliance rather than punishment for non-compliance. Companies are being inspected and audited largely against their own commitments made in applications or procedures they have created themselves.

Compliance tools include:

- Verbal warnings, which apply to the majority of non-compliance situations;
- Assurance of Voluntary Compliance (AVC), a written promise to correct a non-compliance within a negotiated timeframe (the speaker noted an AVC or taking immediate action to correct a problem is viewed as a positive indication of a company's commitment to do good work, not a negative one);
- Inspection Officer Orders, used when a hazard to safety or the environment has been identified, or to protect property;
- Inspection Summary Reports, outlining the inspector's observations about the non-compliance situation; and
- Referrals to the Board, detailing the circumstances of the non-compliance and recommending a course of action.

The Board is considering using fines to promote compliance, but the speaker acknowledged that there are details to be worked out. For example, there is currently no mechanism in place to confirm when payment has been made.

An audience member observed that often when a company receives an AVC there is a concern the company may be seen as uncooperative, when in fact the person onsite may not have the authority to make the necessary change or may not agree that the situation is non-compliant. The speaker agreed and reiterated that the AVC is considered a positive indication of a company's intent to do good work.

A question was raised about whether the number of AVCs a company is issued is used to determine future audit requirements or whether the AVCs are used as internal performance indicators within the NEB. The speaker stated the raw numbers have limited value since they are an activity indicator only.

A question was asked about the qualification of inspectors and whether the professional people who become inspectors also need to have significant field experience. The speaker responded that some inspectors do have significant field experience, while others are fairly new graduates. A graduated scale allows those with less experience to gain the experience they need before becoming inspection officers by having them undertake inspections with a mentor. It can take up to a year before the new inspector is designated. An audience member strongly encouraged that those people hired fresh out of school gain significant experience in operations before they become inspectors.

The speaker summarized the qualifications of NEB inspection officers, saying most of them have environmental degrees or diplomas, engineering degrees, or significant field experience, as well as additional technical training from a variety of sources.

A number of questions about the difference between inspections and audits followed. When asked if there was any consideration to combine the two, the speaker indicated that inspections follow a set of established criteria while audits take more of a systems approach. Coordination of the two is sometimes difficult in the construction phase and therefore it is not always possible to coordinate them.

An audience member asked why the NEB needed to supplement audit reports with inspections, to which the speaker replied that with more than 200 instances of

non-compliance in operations and construction last year, there was a continued need to inspect. In response to another question, he said he saw inspections continuing on operations at this time, but with more coordination with audits. He indicated that frequency will depend on the project. Further, inspections are not intended to supplement audits, but are equal to them.

A question was asked about the process of incident investigations – what did the NEB do and how was it involved? The speaker replied that most investigations are paper exercises, having an incident report followed up with a more detailed report. Much of the work is done in the office, e.g., phone calls and letters to companies to determine factors and what they are doing to correct it. Other situations, for example ruptures or fatalities, are more in-depth, with inspectors out in the field evaluating responses. Everything is being investigated in some form or another.

When asked about staff counts at the NEB, the speaker said each team had eight to 12 people, on average. He gave the example of having multiple assessment teams of a similar size. Specifically the construction compliance team has 12 people, operations compliance roughly the same amount, and the audit team has a somewhat smaller group.

Damage Prevention Regulations (two sessions)

Ken Paulson

This two-part interactive session provided an overview of and sought input on the content of the Guidance Notes for the NEB *Damage Prevention Regulations*. The speaker provided a brief introduction to the development of the Guidance Notes, and summarized the NEB's purpose, supporting principles and compliance philosophy.

The audience was asked their opinion about the NEB's intent to introduce fines for dangerous non-compliance, and to publish details of the fines issued. One audience member remarked that there were 13 types of fines, with the vast majority against the pipeline company. He noted that the fines are not terribly big. He expressed concern about publishing the name of an individual violator when the majority of the violations are the company's responsibility; specifically he was concerned about third-party contractors. Fines are not intended to be punitive, the speaker noted, but to have repercussions to prevent recurrence. This parallels initiatives by Environment Canada and Alberta Environment who have published a list of violators on their respective websites.

One audience member was curious about whether, if the NEB is planning to publish a company's name, the Board would still send a copy of the letter to the insurance company. The speaker noted the NEB is not planning to send a copy of the letter to the insurance company, but could make them aware of the violation via news release or other methods.

Another audience member suggested using consistent enforcement tools, such as the Assurance of Voluntary Compliance (AVC), instead of levying a fine. The speaker confirmed that AVCs and inspection orders would not disappear. While the amount of the fine is not onerous, publishing a company's name is a source of embarrassment, and may have implications for future business.

When asked who makes the judgment call about when a company will be fined, the speaker responded that the regulations do. However, Board inspectors are given some discretion in making these judgments.

The fines are a new concept and can only be developed under the federal *Contraventions Act*. The NEB's legal group is still looking into how they will ultimately be administered. Fines are paid to the Receiver General, so the NEB will have no way to know if the fine is paid.

There was lengthy discussion about penalties for violations, including whether individual persons' names would be included on the annual list of violators, or whether companies alone would be listed. The speaker said the NEB has not yet decided. The Board is open to a fair and consistent way to do it without penalizing individuals. The speaker added that there should be some rules about which of the fines go on the Internet at the end of the year.

There was some question about whether all the fines were needed, for example, how necessary was a fine for failure to report to the Board? There was also lack of clarity about whether the amounts indicated were minimum or maximum amounts. There was consensus that everyone wanted fines – even landowners. However, the details need to be finalized.

When asked if there are any pipelines not required to follow the Guidance Notes, the speaker noted there are no exemptions in the current draft – the Notes apply to all pipelines regulated by the NEB. The speaker noted that this may require some additional consultation with commodity pipeline companies.

The speaker described the NEB's interpretation of "One-Call": an organization of operators that coordinates requests for locates and provides advance warning of ground disturbances or other work close to existing

subsurface installations. When asked if the NEB could make a one-call association mandatory, the speaker responded, “Yes and no.” In the U.S., Congress made it mandatory for each state to establish One-Call. In Canada, there is no such act in Parliament. The NEB only regulates pipelines that cross boundaries. The NEB does not have the authority to mandate a One-Call system for all underground facilities. On the other hand, the speaker noted that the EUB has introduced tentative requirements for mandatory one-call membership.

The speaker introduced a proposed new safety zone, where the measurement of the zone is taken from the centre of the pipe instead of from the right-of-way. This prompted a flurry of questions and comments:

- When asked if the shift in the 30 m zone was made to be consistent with the EUB, the speaker agreed, noting that cooperation between regulatory authorities is positive.
- One participant was confused about changes in the delineation of the safety zone. He observed that the old way seemed clearer, as there is now a safety zone inside and a safety zone out of the zone, plus 5 m for deep excavation. The speaker noted that the safety zone extended across the right-of-way before.
- Changing the safety zone, after having an education program for five years, may cause confusion. The speaker replied that this confusion must be weighed against ease later on. It is easier to measure from something physical, particularly if fines are being imposed for violations.
- Another comment was made that most companies don't put warning signs right over the pipeline, but offset them, so there may be difficulty finding the pipeline in the middle of the field. The speaker again pointed to the need to rely on an awareness program. Signage doesn't mark the exact location of pipeline. You must call before you dig. Landowners, for example, must call the pipeline company before they dig. NEB surveys indicated that people don't know where the edge of the right-of-way is.
- An audience member expressed surprise to see a drawing in the draft Guidance Notes. He thought instead of specifying a distance, the company had to be contacted. He was concerned that there are several zones – which one to use? The speaker replied that initially the NEB considered simply removing the written leave requirement for digging within 30 m of the right-of-way and replacing it with “call before you dig”. Initial thinking did not include any changes to how the safety zone would be measured. Surveys indicated people

don't know where the edge of the right-of-way is and they don't associate the right-of-way with the pipe. Another person noted he had no problem finding the edge of the right-of-way, but expressed concern about the cost to change all the literature. The speaker asked him to consider what is more important – public safety or the cost to change literature?

- A participant asked for clarification that working outside the 30 m zone does not require notification. The speaker explained they wanted to put in a clause stating that with any distance, if there is the potential to damage pipe, you must call. However, the Board has limited authority over specific activities outside of the right-of-way.
- Another audience member suggested the 30 m zone is being shifted to address landowners' perceptions. In fact, the speaker noted it has not been changed due to pressure from any group. It is the right approach for safety.

There was more dialogue when the speaker indicated landowners must now call for a locate instead of going to the pipeline company for approval when they wish to operate within the safety zone.

- When asked if decreasing the safety zone would increase the likelihood of a strike, the speaker acknowledged that the physical width of the safety zone is lower than before. Pipeline companies must rely on landowners to contact them. The speaker also noted that if someone does not know where the edge of the right-of-way is, measuring from that point becomes meaningless in the prevention of accidental damage. Pipeline safety is dependent on getting the message across that when you are working near a pipeline and there is a potential for damage, that you must call the pipeline company.
- An audience member wanted to know if there were thoughts about developing setbacks for seismic operations, mining or excavation. The speaker said the NEB has talked about it and if the activity is within 40 m from the edge of the right-of-way, the operator must get leave from the Board. The Guidance Notes will discourage seismic activity at 40 m, but beyond that, there is little the Board can do as the Board has no authority to make regulations setting out where leave under Section 81 of the NEB Act is not required.

- The recommendation was made to recognize API's 1162 as an effective public awareness program.

Discussion continued in the second session with a suggestion from the floor to make a change to the Supporting Principles of the NEB, to read: "The Board respects the rights of owners or authorized users of property which contain or are adjacent to rights-of-way."

Crossings were discussed by the group. One participant observed the current DPRs don't address standard technical requirements. The speaker said it was considered, but no standard exists. The speaker noted that if someone wants to cross your right-of-way, you should protect the pipeline and be reasonable in your requirements. The agreement is between you and the party who wants to cross. A further question dealt with how an equipment owner would know if his agricultural equipment was going to cause a problem when moving over a pipeline. The speaker responded that it's all about communication. The pipeline company must determine that the load imposed will not cause a problem. 'Generic' approval can be given for a specific operator and specific equipment. Approval each time the equipment owner wishes to cross is not necessary.

A suggestion was made to change the wording of Section 9 (1) to read "...along or under the pipe within the right-of-way" because the agreement is only within the right-of-way.

One change to the wording was suggested in Section 9 (2): "Pipeline companies shall respond to requests by proponents..." The speaker said he would look at softening the wording as suggested.

It was agreed to take a question off-line about Section 81 and why the NEB can impose requirements under Section 112 for activities granted approval under Section 81.

Section 12 of the draft regulations says, "persons planning a ground disturbance within the safety zone must notify the pipeline company... prior to commencing the ground disturbance." A participant asked if that section included activities outside the safety zone that could cause damage to the pipeline – and asked who makes that determination? The speaker noted the NEB does not have legal authority to make it mandatory outside the safety zone. The participant said he expects this will be a big problem in the future.

There were some clarifications requested from the audience. Regarding notification, most one-call centres require two days notice in advance of commencing the ground disturbance, but the regulation says three days. The speaker confirmed the Act says three days. Another audience member commented that if the Board doesn't have the authority to make people notify a pipeline company, how can the NEB use the word "must" in the regulation. The speaker committed to determine whether use of the word "must" was appropriate. It was suggested that the Board check the entire document due to a perceived inconsistency in the use of the words "shall", "must" and "should consider."

A question from the audience requested clarification about whether the ground disturbance mentioned in the regulation is within the safety zone. He believed it was unclear, a point on which the speaker agreed.

Also regarding notification, an audience member pointed out that in the chart outlining activity description and pipeline company notification, the word "exaction" should read "excavation."

The question was asked whether the 5 m limit outside the safety zone for deep excavations would be subject to soil conditions. The speaker noted an engineering assessment would determine that. Then a participant asked that since a horizontal distance can't be established, how can it be enforced? The speaker noted the company must rely on notification. Because it is beyond the safety zone, it was suggested that the word "required" could be changed to "recommended," subject to soil conditions.

Engineering issues were again cited when the speaker responded to a query about the lack of exemption for mobile equipment crossing pipelines. He said the NEB does not provide an exemption for normal farm equipment, and added there is a risk that normal practice will change over time and exempting other equipment is an engineering issue. Further, the NEB was told that pipeline companies have an allowance for agricultural land use in the many existing easement agreements. It should be made clear the farmer may still need to contact the company if their equipment has a larger than usual footprint. A member of the audience identified one instance of damage to a pipeline from normal farming equipment; the soil had eroded over time and a pipeline was struck by farm machinery.

An audience member asked why this issue can be addressed in an easement, when page 7 of the Guidance Notes indicates the easement does not supersede the regulations. The speaker agreed that is the case. The person was concerned about the impact on his agricultural agreements. The speaker committed to adding some verbiage around the issue, such as: “If you have such an exemption in your easement agreement, that’s fine.”

Next on the agenda was the subject of locates, and again the audience offered comments and discussion. One person noted that having a pipeline located does not constitute an agreement, and asked about the benefit of doing a locate if the work could not proceed. The speaker indicated he would attempt to include a comment to that effect.

A participant suggested that as well as keeping records of the qualifications of locators on file, it would be important to record the devices they use. The speaker stressed that companies should be responsible for making sure the people working for them are qualified to do the assigned task – whether they are employees or contractors. When asked if the Board has guidelines for qualifications for locators, the speaker replied the Board wants to see that locators are doing their job effectively and accurately. He suggested having a look at the Guidance Notes.

Regarding locates, a participant asked for clarification about the term “other facilities” in referring to the requirement to accurately identify the horizontal alignment of the pipe or other facilities. Did the Board mean other companies such as TELUS or Shaw? The speaker confirmed it refers to the company’s facilities, for example, communication lines. Another audience member commented that the cost to locate can be high, to which the speaker indicated companies are responsible for their pipeline being safe and being operated in a safe manner. Nuisance locates were cited by an audience member, and the speaker noted that the Board would have to decide if a situation is “vexatious”. The member suggested a fine in cases where this was determined.

Section 18, Control of Activities, refers to halting not only activities that are contrary to the regulations but also those beyond the scope of the regulations that pose an immediate danger to the facilities. On request from an audience member, the speaker noted that “it is better to be safe than sorry”. He advised that pipeline companies have an obligation to address situations that could cause serious repercussions for the safety or safe operation of the pipeline.

There followed discussion about whether the speaker could conceive of such a situation, to which he asked the group if it was needed, or if it should be removed. A participant noted the company would have to be aware of the activity, and the speaker reiterated that if there is no need for this item, he would remove it. Another participant suggested the regulation gives the pipeline company some legitimacy, and the speaker disagreed.

Section 20, Control of Activities, says in part that no mechanical excavating equipment may be operated within 5 m of the centre line of a buried pipe without positively determining the pipe’s location. An audience member questioned the need to extend the limit from 3 m to 5 m, if there weren’t any issues in with 3 m. The speaker explained it was for consistency with Alberta regulations. When asked if hydro-vacating is allowed, as it is non-destructive excavation, the speaker indicated it is allowed.

The speaker was asked how long records of investigations must be kept and he said he believed it was for the life of the pipeline.

Emergency Preparedness and Response

This full-day session was subdivided into a number of presentations dealing with specific issues. Dialogue was extensive and lively. Issues brought up were debated but not all issues were resolved. Both sides agreed to continue the dialogue in another forum.

Part 1: Emergency Preparedness and Response Programs (EPR)

Bruce Moores and Leo Jansen

The NEB began its shift toward goal-oriented regulation in 1999. The *Onshore Pipeline Regulations* issued in 1999 contain provisions for emergency response planning. After September 11, 2001, the NEB set up a task force on security, which consulted with various stakeholders. The NEB sought a level of comfort regarding security and emergency preparedness within regulated companies, and issued an all-company letter in April 2002 outlining its expectations and requirements for emergency preparedness and response. The NEB expects each regulated company to have developed and implemented a full EPR plan as of December 2003.

Meanwhile, the NEB has been conducting audits that include assessments of EPR programs. Industry generally exhibits a good level of preparedness. However, the NEB found some weak EPR program development (structured, formal programs that include goals, feedback, etc.). In addition, emergency exercises, continuing education programs and liaison programs were not well documented. The speaker indicated that while companies are currently better prepared for unforeseen events than they were in the past, there is room for improvement.

Key elements of a successful EPR program include:

- Program development;
- Emergency preparedness manual;
- Liaison program;
- Continuing education program;
- Training;
- Exercises;
- Equipment; and
- Records and evaluation (feedback).

Companies must demonstrate that EPR programs are based on sound principles of science and engineering, including hazard assessment, use of dispersion models, and other standard industry practices.

The speaker added that what the NEB really looks for when examining a company's EPR program is the thought process that went into the program's development and implementation. The NEB seeks assurance that the EPR program is not just an "add-on" but forms part of a company's overall planning, strategy and management system. In addition, the EPR program must stand the test of reasonableness; the NEB recognizes that common sense plays a role in risk assessment, emergency preparedness and response.

The second speaker gave a brief overview of security issues associated with pipeline infrastructure. He commented that securing the whole of Canada's pipeline infrastructure is nearly impossible, given huge distances and remote locations. The federal government is in the process of making changes to the NEB Act that will specifically include "Security" in the regulation, along with safety. When these changes will be completed and come into force is unknown. Nonetheless, NEB inspections have traditionally included

some consideration of security management issues; however, these have largely been focused on physical security management. The NEB is developing a Security Management audit protocol that will include a review of cyber security, physical security of pipelines and facilities, and personnel security. Due to the sensitive nature of auditing security management, the NEB is sensitive to the need to require all Security Management auditors to have the appropriate security clearances. The NEB may consider involving resources from the RCMP and CSIS in the assessments of a company's security management program.

Debate was frank and lively. The discussion opened with a question regarding whether the NEB has basic training requirements for emergency responders. The speaker replied that the NEB has not set out specific requirements, preferring to allow companies to develop their own training programs. However, the NEB expects that individuals with responsibility in an emergency are aware of their roles and have received adequate training. Training should extend broadly throughout the company; for example, do not neglect switchboard or reception personnel. An audit would request documentation of training and exercises completed by the company.

The discussion then turned to internal versus external emergency responders, and what level of training or awareness could reasonably be expected for external personnel such as fire, police, ambulance, and others. The discussion pointed to the differences between rural situations, where emergency responders tend to be volunteers, as opposed to urban situations, where emergency responders are full-time, trained professionals.

In response to a question about whether NEB audits would extend to external emergency personnel, the speaker said the NEB cannot force fire departments or other external first responders to take training. The NEB can only assume that external responders have the knowledge and capability to perform their tasks. However, the NEB would seek assurance that the company had made reasonable effort to contact and consult with external responders. A company could be expected to ask whether the responder — a fire department, for example — felt capable of executing emergency plans. The company could offer training, equipment, and dialogue. Making external responders part of a tabletop or full-scale emergency exercise is encouraged. This is especially true of rural (volunteer) fire departments. An audience member recommended creative approaches to engaging and working with external first responders.

Several audience members reported that fire departments (both urban and rural) may be reluctant to state in writing that they have a full and complete understanding and ability to deal with a pipeline-related emergency. (One person pointed out that if first responders cannot make such a commitment, the community is in danger and faces issues and problems beyond preparing for a pipeline emergency.) In the absence of assurance that first responders can effectively respond to a pipeline emergency, the company must rely on their own internal resources.

An audience member who represented a company with extensive pipeline operations in both urban and rural settings said that the NEB's expectations for contacting and working with external first responders can be onerous, given the large distances and number of towns, cities, and jurisdictions involved. The requirement for a full-scale emergency exercise every three years is simply not feasible (for more discussion on emergency exercise, see below). The NEB speaker responded that dialogue is needed between the NEB and the company to resolve this issue. The NEB's goal is public safety without reliance on prescriptive regulation. The NEB seeks assurance that emergency personnel are aware of risks and emergency plans. EPR program development implies dialogue and discussion with first responders regarding the risks and hazards posed by pipelines and facilities.

These differences in turn led directly to discussing the size of the emergency preparedness zone. This is the area on either side of a pipeline within which the company's EPR programs apply, including the requirement to maintain current contact lists of all residents living within the zone.

A question was raised about the extent of the zone: should the zone in a rural setting be larger because the company would have to rely on its own personnel to a greater extent in the event of an emergency, whereas in an urban area, professionally trained first responders would be available? Additionally, maintaining a current resident list, and contacting residents within the zone in the event of an emergency, is more manageable in a rural setting.

According to the speaker, the NEB seeks reasonableness and forethought on the part of the company, bearing in mind due diligence and liabilities. The speaker remarked that there are indeed difficult and fundamental decisions to be made when developing an EPR program. For example, in an urban area, can a company realistically keep a current contact list for all residents within the zone? The NEB and the company must both seek a balance between reason and public safety. Perhaps the answer lies in defining two different zones, a planning

zone that would encompass a large area, and an impact zone that would deal with a smaller area where efforts would be concentrated in the event of an incident. The planning zone would imply certain activities such as contacting residents to make them aware of risks and hazards, whereas in the impact zone activities would be more intensive, including dialogue with external first responders, training, and so on.

With regard to the need to contact and inform residents living within an emergency zone, there is no legislative lead. The question about whether companies need to contact residents in an urban area where professional first responders are available at all times remained unresolved. (See further discussion on this topic in the next session, below.)

Regarding security issues, an industry member noted that the NEB's letter of 24 April 2002 suggests that companies should design security programs to "prevent" terrorist attack. Rather, the NEB and regulated companies should concentrate their efforts on DETERRING acts of terrorism, vandalism, and similar damage. If a terrorist, acting alone or with a group, seeks to create a spectacular event, then there is little any company can do to prevent it. Urban vandals tend to be more focused and small-scale, although their actions can have negative impacts far in excess of their intent. Such localized vandalism and damage is easier for a company to monitor and control.

A question was raised about security audits, how these are conducted, and the availability of public information arising from security audits.

The NEB speaker responded that security audits must be conducted in a manner that keeps the company's security plans confidential and ensures that this confidentially cannot be compromised. While the OPR-99 full audits include all elements of the OPR and of a company's operation (environmental, safety, and so on), to ensure that confidentiality of security programs is maintained, the security audits must be implemented separately by security cleared auditors and done as a stand-alone audit. Legislated by upcoming changes to the NEB Act, the results of these security management audits will be proprietary and not available to the public, even under the *Access to Information Act*. (See additional discussion on this topic, below.)

Part 2: Continuing Education and Liaison Programs

Catherine Watson

The next session continued the discussion on liaison with external first responders.

The NEB has conducted numerous audits on EPR programs. Approximately half of the resulting findings concerned continuing education and liaison programs, indicating that companies generally need to improve performance in these areas.

The regulations state that a company shall establish and maintain liaison with the agencies that may be involved in an emergency response and shall consult with them in developing and updating the company's emergency procedures manual. The NEB expects the company to have knowledge of the risks and hazards its operations pose to the public. Further, company personnel must have knowledge of their roles and responsibilities, and must make efforts to ensure that external first responders are similarly aware of risks, hazards, roles and responsibilities. Documentation, formalization, and periodic evaluation of the program are fundamental to the ongoing improvement of the program. The NEB does not expect companies to perform audits of external responders.

The continuing education program is separate from, but must be integrated with, the liaison program. The regulations state that a company shall take all reasonable steps to inform all persons who may be associated with an emergency response activity of the practices and procedures to be followed, and make available to them the relevant information consistent with the emergency procedures manual. Further, the continuing education program should target the public adjacent to the pipeline, in addition to fire, police, and medical personnel. The NEB's expectations of the continuing education program include up-to-date, readily accessible lists of residents in the planning zone.

The speaker opened the dialogue by asking the audience how they address large numbers of people living adjacent to their pipelines. What is the best, most cost-effective, and most reasonable method to make the public aware of the risks, hazards, and procedures to follow in the event of a pipeline-related emergency? What are the responsibilities of external first responders? Many of these topics were discussed earlier and there was considerable overlap and re-visiting of previous topics.

One company representative related his experience in the area of community outreach and liaison, saying that joint presentations with other pipeline companies that have facilities in the same region are preferable to each company acting alone to contact the public — the public has a low tolerance for repetitive contact. To engage the public and get people to attend presentations, the company has sponsored dinners and given away door prizes. Company representatives follow up in person or by phone with individuals or groups who don't attend. He concluded that his company has a strong desire to integrate EPR programs and planning with external first responders, whom the company treats as consultants in designing emergency plans. There are numerous pathways to communicating with both the public and with first responders.

The audience generally agreed that first responders are receptive to offers of liaison, training, and participating in exercises. Occasionally first responders raise issues of liability, problems scheduling volunteer personnel for presentations or training, and equipment issues.

The discussion returned to the topic of keeping current lists of residents living adjacent to a pipeline. One company concentrates efforts on liaison with first responders (in urban areas) as opposed to going directly to the public. In a rural setting it is easier to keep landowner lists up-to-date, but keeping current lists is not realistic in a high-density urban setting. It is better for the NEB to set the goal of having awareness campaigns, then allowing companies the freedom to identify the risks, and develop and deliver the programs commensurate with the risks.

Another audience member suggested that there should be different zone delineations in urban and rural areas: 750 metres from the pipeline in rural areas, 200 metres in urban areas. There was considerable disagreement on this point. The NEB speaker noted that residents in rural areas tend to be more self-reliant, whereas urban residents depend on fire, police, and medical emergency responders to a greater extent. Residents within 200 metres of a pipeline need to be informed of the risks, and could be asked to help the company monitor the area for gas leaks (smell) or suspicious behaviour. The public has a right to know what risks and hazards are associated with living near a pipeline.

One industry representative from Quebec noted that in his province, each municipality has the responsibility to develop emergency response plans. When a pipeline-related incident occurred, the company came into conflict with the fire department. The situation was

resolved when the fire department took responsibility and command of the situation. The company now aids in developing emergency plans but does not deliver emergency response such as notification of residents within an emergency zone. The company's responsibilities lie with controlling the actual incident. The NEB representatives concurred that the Quebec response to emergency planning after the ice storm now puts the onus on municipalities. As a result, local emergency planning is now site-specific and takes a one-window approach. The Quebec situation presents a model for emergency planning that could be used by the NEB and pipeline companies.

Companies don't have to reinvent the wheel if emergency procedures already exist in the community, but integration of plans and responses is vital to public safety. Industry should support existing programs through education, training, and liaison. Nonetheless, the regulations state that the company is responsible for developing and maintaining current contact lists. Audience members suggested the regulations should be revised. The NEB representatives replied that clearly an issue exists around the topic of contact lists, and continuing dialogue is required to resolve this issue.

An NEB representative noted that there are many ways to communicate with residents, beyond mailing out brochures or inviting people to an information session. Schools, church groups, community associations and service groups all offer windows for communicating with the community. She urged companies to make full use of their communications and public relations staff. In addition, companies can effectively use the media to increase public awareness of risks and safety issues, by making public information sessions and outreach programs a good news story. Getting the media on-side in this way can have future positive results in the event of an emergency. Use a mix of tools to contact and educate the public.

One industry member related good results in achieving public awareness by increasing signage along the pipeline right-of-way. Making the pipeline more visible tends to increase public curiosity and receptivity to awareness and information campaigns. Improved public awareness also helps other first responders in their jobs.

Board staff also mentioned that in an effort to reduce duplication and to coordinate agency requirements, the NEB has held internal workshops and discussions with other regulatory authorities such as the EUB regarding parallel processes and requirements for emergency response.

Next the discussion turned to the concept of risk in emergency planning. There was general agreement that a company's first priority in any incident is to control the spill or rupture, but often companies are not in a position to respond to secondary or collateral damage such as fires, evacuations, and so on. The issue is that a pipeline company cannot deal with everyone and everything; risk assessment must play a role in developing and delivering EPR programs, and the NEB should give companies flexibility to assess and manage risks. For example, to compensate for not keeping current lists of adjacent residents in an urban emergency zone, a company could take other steps, such as increased monitoring within an urban area.

The speaker responded that companies must use science to assess hazards and set emergency planning zones. Such factors as the size and pressure of the pipeline contribute to determining the risk. The NEB encourages and expects risk-based planning.

A question was raised about other transporters of energy and harmful materials, notably railways, and whether synergies may exist between railways and pipeline companies in terms of sharing knowledge, designing public awareness campaigns, and dealing with external first responders. The NEB works closely with the Transportation Safety Board (TSB); a TSB representative noted that railways are going through similar dialogue with regulators, regarding emergency preparedness. Railways also have deficiencies and issues regarding resident contact lists. The general public has a very low level of knowledge about emergency procedures. Railway companies experience more frequent spill incidents involving a wider range of chemicals and materials, therefore have more first-hand knowledge on dealing with actual events. Pipeline companies should concentrate on tabletop and full-scale exercises.

Part 3: Emergency Response Manuals, Exercises, and Equipment

Ken Colosimo

With regard to emergency response manuals, the NEB wishes to promote goal-oriented regulation by ensuring that manuals are based on thought, science, and evaluation. Manuals must be based on the hazards posed by each company's facilities, materials, and processes. At a minimum, manuals should contain:

- Procedures for the safe control or shutdown of the pipeline;
- Safety and emergency procedures for personnel;

- Contact information (reporting, first responders, internal and external resources);
- Procedures and commitments for training and for updating the manual.

NEB audits to date indicate that most companies have emergency manuals, but many manuals are not based on a formal assessment of the hazards involved. NEB audits frequently find two sets of manuals, the corporate -- or "high-level" manual -- and the field manual. Manuals need to be focused, easy to use, and current.

An audience member asked which version of the emergency response manual the NEB wants -- the management system manual kept at head office, or the more detailed field manual? In the past, this particular company has only provided the management system manual. The NEB speaker indicated that it would be helpful to have both. Electronic versions are acceptable.

Regarding emergency preparedness exercises, again the NEB seeks assurance that exercises are based on thought, science, and evaluation. The point of emergency exercises is to test the emergency response plan and to refine and update the plan based on findings and results of the exercise. At least one simulated emergency response exercise (tabletop or full-scale) should be held annually. At least one full-scale exercise involving (or reasonably attempting to involve) all response agencies identified in the company's liaison program should be held every three years.

NEB audits indicate that most companies are conducting exercises, but the planning, execution, and documentation of these exercises are poor. Generally there are too few full-scale exercises, and tabletop exercises tend to be of poor quality and not well documented. Lessons learned are not being incorporated into emergency plans.

Companies should have, or have access to, sufficient equipment to respond to the worst-case scenario, as identified by hazard assessments and other operating realities. Equipment should be appropriately placed, maintained, and calibrated. Thought, science and evaluation should be the basis for obtaining appropriate equipment.

The issue of security was raised again. Specifically, the questioner wanted assurance regarding the confidentiality of sensitive information. Emergency response manuals contain detailed information about a company's operations and vulnerabilities, and pose a security risk in the wrong hands.

In response, the speaker advised that the NEB auditors tasked with performing a security management audit will have the appropriate security clearances. Further, all emergency response manuals submitted to the NEB are stored in a secure location that is not accessible to the public. The NEB recognizes the potential implications and the liability issues that could result from disclosure of security and emergency preparedness information, and as such, treats manuals as proprietary information not available for public scrutiny.

A question was raised about whether the *Access to Information Act* would override the NEB Act. The quick answer was no; however, the NEB committed to respond directly to those who have concerns in this regard.

As a follow-up comment, representatives from the Transportation Safety Board indicated that similar information submitted to the TSB is protected, and the TSB is not obliged to release such information under the *Access to Information Act*.

Companies are required to submit updated copies of their emergency response manuals to the NEB. One audience member questioned the value of continually sending updated copies of the ER manual since updated copies are provided during audits and inspections. The speaker replied that the NEB seeks assurance that manuals are being updated as a result of exercises, incidents, and other opportunities to learn and refine emergency procedures.

A follow-up question expressed concern about the manuals, saying they contain detailed, site-specific information of little value to the NEB. The speaker replied that site-specific plans for large facilities are indeed of value, but detailed information about small sites or installations is of low value to the NEB.

The discussion turned to emergency exercises. Several industry representatives stated that the NEB is auditing to the standards set out in the Guidance Notes. The speaker replied that this should not be the case. Guidance Notes are not meant to be audit standards. The NEB is looking for prudence and adequacy of a company's exercise programs. The three-year schedule for full-scale exercises involving external responders seems a prudent starting point. In response to another question, the NEB speaker confirmed that dealing with an actual event or incident counts as an exercise, as long as the event is well documented, and emergency procedures are refined as a result of lessons learned.

The NEB speaker also stressed the importance of conducting exercises to deal with all types of hazards.

Most companies concentrate their exercises on pipeline ruptures, but other hazards exist, such as tank leakage. Companies should plan exercises according to hazards, and take into account winter conditions, weather, remote locations, and other factors that could affect the extent of the emergency. Exercises need to be realistic to be effective.

The NEB's regulations do not specifically address risk, although the April 2002 letter does contain the notions of risk and adequacy. A company may choose to perform a risk analysis, then use the results to prove to the NEB that little or no risk exists, thus emergency exercises are of low value. In such cases, companies must bear in mind that immediate, localized safety is not the only risk. In the end, the NEB does expect a risk-based approach to emergency planning.

In response to a statement that it can be difficult to involve all employees and external responders in a full-scale exercise, the NEB speaker reiterated the value of tabletop exercises if they are planned and executed to be as realistic as possible, and the results are documented and evaluated. If they are well executed, tabletop exercises could potentially decrease the frequency of full-scale exercises but not completely replace them. Exercises are meant to help the company improve its preparedness and performance; practice makes perfect. Training is not a substitute; employees and responders must be tested under realistic emergency conditions to prove the efficacy of their training.

At the conclusion of the day's lengthy discussions, an industry representative noted that the Canadian Energy Pipeline Association (CEPA) has an emergency management committee that could present an appropriate venue to continue this dialogue and resolve some of these issues. The NEB speaker agreed that this action would be useful.

Part 4: Emergency Preparedness and Damage Prevention at Alliance Pipeline

Mike Sullivan

The speaker began his presentation by pointing out that the pipeline industry is fortunate to have numerous opportunities for information sharing, dialogue and debate with the regulator. Open and frank communication is vital to the successful management of all phases of pipeline planning, construction, and operation.

The speaker discussed the development of the emergency response plans at Alliance Pipeline, including public awareness efforts, and presentations made to external first responders. He commented that regardless of whether

an exercise is full-scale or tabletop, making the exercise realistic engages the participants. He said that employees are allowed to consult their emergency manuals during the exercises; the exercises are tests of the system and plans, not tests of the individual. Exercises are tools for learning and should not be intimidating to the individuals taking part. The post-mortem phase of an exercise is critical for evaluating and revising emergency plans.

He then presented a video of how Alliance conducted a full-scale emergency exercise that involved local first responders including fire and police.

The speaker responded to several specific questions, including the need to accommodate regulations in both the U.S. and Canada. He confirmed that Alliance has two separate but parallel emergency planning systems, one on each side of the border. He further remarked that Alliance has relatively few field personnel, and the company expects that local fire, police, and medical personnel would be the first to respond to an emergency. Therefore the company feels it is essential to work closely with first responders. Alliance is going to all towns, areas and responders with presentations and offers for training. When approached by the company to participate in exercises, first responders have been willing and receptive.

Replying to the question, “What is the biggest challenge to developing your program?” the speaker said balancing NEB needs against what makes sense for the company and the community is the biggest challenge.

Engineering and Safety Inspections

Nathan Len

The speaker started by summarizing the enforcement tools the Board uses to ensure compliance with engineering and safety inspections during the construction and operation phases of a pipeline system. The remainder of the presentation focused on the inspections themselves. The speaker first detailed construction inspections, saying they are done to ensure the company is meeting its commitments made during the application process. During construction inspections, the inspector makes observations along the right-of-way, reviews documents on-site, and communicates with company and contract employees. Specifically inspectors look for safety hazards during ditching, blasting, stringing, bending, welding, coating, lowering-in, backfilling, pressure testing and final tie-in.

NEB facility inspection officers may also be designated as Human Resources Development Canada (HRDC) Health and Safety officers, and they inspect all facilities to both the *Canada Labour Code* (CLC) and the applicable NEB regulation (*Onshore Pipeline Regulations* (OPR); *Processing Plant Regulations* (PPR)). The Board regulates approximately 700 facilities across Canada, of which about 10 per cent are inspected each year, taking a risk-based approach. The goal is to inspect significant facilities every two to three years.

Because gas plants are more complex than other pipeline facilities, and have more potential hazards, they are treated differently than other facilities, with a goal of two inspections per facility per year. Inspectors evaluate specific processes in the plant with an eye to safety and environmental protection. At the conclusion of all inspections, a close-out meeting is held with company representatives and an inspection summary is provided for all inspections.

The speaker invited the audience to give feedback on the effectiveness of inspection reports. One person said at his company they read the reports and try

to follow the information, although he didn't recall receiving an inspection summary after an inspection conducted during an audit at his facility last January. A representative from a construction company noted his client has extensive systems in place to manage issues identified by the Board, and he also finds the information helpful to share on other construction projects. A third person referred to a Spring inspection at his facility and said the feedback was sufficient.

The speaker then discussed coordinating inspections with audits, noting that it is difficult to coordinate them all the time. The audience made the following comments on inspection coordination:

- I'd like to see coordination with field and office, as the field doesn't necessarily have all the information or answers and the inspectors can draw the wrong conclusions about the level of cooperation.
- We had an inspection and an audit at the same time and it seemed both the inspector and the audit team were looking for the same thing – where we weren't following our system. I'm confused where one stops and the other begins; maybe one group could do the whole works instead of splitting it between two. (The speaker speculated that perhaps an inspector could go along with the audit team.)
- You can't coordinate audits with inspection all the time, especially during construction.
- If there is an overlap, they could at least coordinate it so they don't ask the same questions.
- Make advance contact with the company when both could come; ask if it is better to have them come separately or together to ensure there is adequate manpower to do it combined.

An audience member asked if the Board was trying to accomplish something different with inspections

and audits. The NEB representative said the two have common elements but different purposes. Where an audit gives a deeper look into the system over time and has the ability to compare what's currently going on in a facility against two years ago, for example, an inspection provides a snapshot of how things are going at a given time.

Another audience member asked if there are different reference points for audits and inspections. The NEB speaker noted this would be covered in more detail in the next session, where they would be talking about integrating operating functions and collected data.

Another audience member noted that he was seeing a trend with NEB inspectors doing ad hoc inspections and raised the following questions:

- Are they considered an inspection or an audit?
- What purpose do they serve and how do they fit in?
- Does the information go back into the risk model?

The NEB speaker confirmed that the questioner was referring to an emergency response plan audit that was performed following a pipeline rupture. The purpose of a rupture investigation is to determine what happened, why, and what led up to it. The speaker noted this is a case of taking advantage of information as it pops up; there is no better situation to evaluate the effectiveness of an emergency response program than an actual emergency. The information is shared within the Board and incorporated with the audit. Further, the Board plans to continue to do both audits and inspections. The speaker clarified that an audit measures the adequacy of the management system, while an inspection provides a snapshot of effectiveness and compliance.

This prompted an audience member to observe that if management systems are adequate and effective it should take care of the need for inspections; he said he was still not clear on the role of the inspection. The speaker responded that an audit looks at a company over many different areas, while an inspection is a quick verification that systems are still working. Small changes can then be made that influence effectiveness.

Another audience member asked what the dual aspect adds to the compliance strategy. The speaker noted this needs more discussion internally, and asked that it be parked for now.

A person commented that they have had inspections followed by a full audit, and there is a subtle difference between the two. In an audit you drill down to a detailed

level. The speaker noted the Board is looking for areas of improvement, thus the reason for this session.

Again discussion turned to the point that if management systems are effective, companies should not have problems that need inspection. An NEB employee involved in developing the audit system said they agree with the point raised and will attempt to decrease the overlap and duplication. He would like to see the NEB combine inspections with audits, and that may require expanding the audit program. As an aside he noted that during construction inspectors are looking for compliance with the CLC.

An audience member raised the question, what is a focused audit? An NEB representative responded it is when the focus is on a single topic, for example, emergency preparedness response or integrity. He said it is difficult to do these audits in isolation of other areas. In fact, the Board only did focused audits last year. None have been done this year and none are planned.

The speaker asked for audience input on the risk-based process to determine what new construction projects to inspect. Audience comments include:

- If you've done an inspection and an audit, you're looking at compliance history and how the company has conducted itself in the past. (The speaker confirmed the Board does look at history when determining whether to inspect a specific project. If there have been no problems in past there is a lesser chance that an inspection will occur.)
- Random inspections on construction are fine. We know we have documents and programs in place whether the NEB shows up or not. We're prepared for inspection if it does occur.
- We question the role of the NEB in construction – is the role quality assurance or quality control? Quality control should be the owner's responsibility. An audit fits in well to ensure quality assurance. (The speaker said the company is responsible for both; the NEB takes a snapshot of whether the company is meeting their commitments made during the application process. Also safety is a key focus. Sometimes verification via an audit can be too late as the pipeline is already in the ground.)

The speaker then called for other suggestions and recommendations, saying the Board realizes continuous improvement is key. An audience member asked the speaker to clarify the Board's role regarding contractors on NEB-regulated sites, noting that much of the

construction and general maintenance is done by contract workers who are not under the jurisdiction of the NEB and CLC. The speaker replied that ultimately the company is responsible to ensure the safety of all workers onsite. An NEB inspector added the company cannot abrogate its responsibility for safety. Contractors work to provincial regulations, and NEB inspectors can cite provincial regulations if the company has not ensured contractors are working under those regulations. Regulations are the minimal requirements. Typically, the NEB doesn't see many contractors who don't follow provincial regulations and minimal requirements.

An audience member asked, is it clear which employees are under the CLC? The speaker answered there is no clear policy especially when companies hire at arms' length, but generally they are provincially regulated. Another audience member asked if you could just assume CLC? The answer is that contractors are provincially regulated, and provincial regulators will come onsite to investigate and ensure OSH. There is a gray area when companies hire third parties to operate facilities.

A question was asked about whether there are written guidelines about the NEB's position, as there is strong legal opinion that construction falls under HRDC. An NEB representative responded that workers are typically provincially regulated so provincial OSH applies, but you are actually constructing to CLC requirements.

In response to the question of whether NEB inspectors are trained about the regulations, an NEB representative said they try to keep inspectors up-to-date on provincial regulations, but sometimes she does receive calls asking about the appropriate regulation to apply.

Goal-Oriented Regulations and Emergency Preparedness and Response Programs

Bruce Moores and Terry Dick

The session began with the NEB representative providing a brief background and history of the development of the goal-oriented *Onshore Pipeline Regulations* (OPR). The speaker noted that the Board's expectation was that regulated companies would have fully developed and implemented Emergency Preparedness and Response Programs (EPRs) in place by September 2002, as per an all company letter issued by the Board on 24 April 2002. To assist in this process, industry consultation had taken place and Guidance Notes had been issued.

To date, there have been 25 audits of EPR programs from which it has been concluded that overall there is a good level of emergency preparedness. Areas for improvement include EPR program development, specifically a need for better documentation of the liaison process, continuing education programs and exercises.

The speaker then restated the requirements of Sections 32-35 of the OPR and outlined the eight principal components of an EPR. Some challenges and potential issues for discussion were identified, such as whether the Board was stretching the regulations in requiring EPR programs, whether the Board was being consistent in conducting its audits, and whether or not the Board had undertaken sufficient consultation on its expectations. For regulated companies, more effort may be required to demonstrate their programs to auditors, develop a clearer rationale for some activities and procedures, and provide more timely feedback on potential issues. There was also some discussion on the need for the Board to be reasonable and fair to companies where there is a conflicting opinion on the feasibility of developing and implementing an EPR program component.

The speaker from industry provided an operator's perspective, stressing that his company's highest priority was the safety of their employees and the public. Achieving this required an over-riding executive

management commitment, underpinned by company policies and operating procedures and supported by the active involvement of HS&E committees at the employee level. Internal compliance is achieved through a program of planned inspections and internal audits augmented by a third party (external) audit. The company also shares information through partnerships with industry associations such as CEPA and CSA.

Public safety issues are being addressed through compliance with industry codes of practice and standards such as CSA and NFPA, as well as conformity with federal and provincial legislation/regulation via regulatory audits of the company's management systems and facility inspections. External enforcement measures range from warnings to fines and stop work orders.

The speaker then drew attention to the shared desired outcome on public safety of both the regulator and the pipeline company, illustrating this by comparing their separate though parallel processes.

He then focused on the fact that almost 50 percent of the findings (123 /263) in the 25 Board audits were related to non-compliance in emergency management. His conjecture as to why included the following possibilities:

- The audit process itself is inconsistently applied;
- The amount of detail in the measurement tools used (i.e. OPRs, Guidance notes and the April 24th letter);
- The requirements may be unclear or even unattainable;
- There are legitimate differences in the interpretation of requirements; or
- There may be insufficient resources and/or a lack of commitment.

The question was asked, "What do you think are the

reasons for non-compliance when we are all focused and diligently working towards the same goal of public safety?” The issue of identifying and contacting everyone in an emergency planning zone was raised. It was noted that this is the area where the Board had made a significant number of findings. It was suggested that there may be a need for consistency in interpreting the intent of the 24th April letter.

The presentation slide depicting a common outcome but different strategies received comment and a question to industry, “If operating budgets were increased five-fold and allocated to the appropriate areas, would the issues raised above disappear?” The speaker from industry replied that currently a lot of time and effort went into developing company policies. He was supported by others who didn’t think that throwing money at the problem would make it go away.

The question then was asked, “Who will the public look to in an emergency?“, to which the consensus answer appeared to be emergency services and the pipeline company, in that order.

The Board was urged to be flexible, yet at the same time maintain the intent of the EPR. A request was made for guidance on the intent and application of the content of the 24th April letter. Specific clarification was sought as to what was the desired content of the continuing education program. What was understood by the term “adjacent” and how realistic is it to make contact with 100,000 people? How will the NEB measure the effectiveness of programs? Public notification was said to be unduly onerous on companies, especially in densely-populated areas.

It was suggested from the floor that in major centres the EMS are the appropriate responders. There was an expressed need for creativity in addressing the contact issue. One audience member stated that limited resources require creativity, another pointed to the work of the CEPA Emergency Management committee.

There was a brief discussion on what constituted a worst case scenario – a release or ignition upon release – and the adequacy of a 200 m consequence zone.

Debate then switched to the consistency of the audit process. Is compliance more readily achieved by some companies as a function of their system’s geography? Do companies share a common perspective and vision for the EPR? The NEB speaker asserted that the regulator has the responsibility for setting the bar with respect to reasonableness.

One company representative said that he didn’t like to hear Board auditors make comments such as “company X does it this way”. It was pointed out that one should reap the benefit of sharing the best practices that had emerged from the 25 audits, with companies being able to incorporate such advice as they best saw fit. Smaller companies, in particular, could benefit from a pooled effort, though they need to be able to defend their own programs.

With respect to tabletop exercises, it was agreed that much can be learned from multiple company joint exercises and that these are a very efficient use of resources. The desired frequency of exercises was then discussed within the context of goal-oriented regulation, with a consensus that once a year was both adequate and within company budgets.

The session concluded with a discussion on staff resources, in particular how to make a determination of how many people were needed for an effective EPR. The industry speaker commented that while resources were important, it was more important to use them effectively.

Guidelines for Filing Requirements – Review Process

This half-day session was divided into several parts, dealing with various aspects of the process for filing applications with the NEB.

Part 1: NEB Filing Manual Kevin Gerla

The NEB's *Guidelines for Filing Requirements* (GFR) have been in use since 1995. The NEB started a process to revise this document in September 2002. Draft sections of the revised GFR were released for comment in September 2003. Comments have been received, reviewed, and incorporated as appropriate. On December 2, 2003, at the Calgary workshop, the NEB released the final draft of the revised GFR, renamed the NEB *Filing Manual*, for review and comment. All comments must be received by January 23, 2004.

The new *Filing Manual* outlines the type of information that a project proponent needs to address in order to develop a complete application. The Manual clarifies the NEB's expectations regarding what should be included in an application and to what level of detail. The Manual attempts to be less prescriptive than the old GFR, in keeping with the NEB's overall movement toward goal-oriented regulation.

The speaker provided detail on the new *Filing Manual* by giving an overview of each chapter. He noted that the *Filing Manual* contains guidance for applications for such physical projects as construction of a new pipeline or related facilities, in addition to guidance on non-physical applications such as Tolls and Tariffs, Import and Export Orders, and so on. He also pointed out that once the *Filing Manual* is finalized, it will be on the NEB's Web site in an interactive and cross-referenced format for easy use.

The speaker then highlighted the major differences between the *Filing Manual* and the GFR. Overall, the Manual addresses more issues and provides more information than the GFR. The Manual is based on application type, making the organization and information flow easier to follow. The Manual consolidates requirements for all applications. The Manual gives specific guidance and examples in "grey boxes" (sidebars).

The speaker then provided an overview of the differences between the GFR and the *Filing Manual* with respect to engineering, environment and socio-economic, lands, consultation, economics and tolls and tariffs.

To conclude, the speaker outlined next steps: the deadline for comments on the *Filing Manual* is January 23, 2004; the NEB will then finalize the document and release the *Filing Manual* in the spring of 2004. At that time the NEB will initiate an implementation plan to swiftly transition from the old GFR to the new *Filing Manual*.

The speaker invited comments and questions throughout his presentation. However, he noted that there was a lot of information to absorb, and that the audience and other stakeholders have until January 23 to submit their comments.

The only question from the floor was about the requirement for information on the economic feasibility in an application — is this a new requirement? The speaker replied that economic feasibility has always been required in an application, but the *Filing Manual* makes the requirements explicit, clear and specific. No other questions or comments were raised during the presentation.

Part 2: Filing Manual Implementation Plan

Kevin Gerla

Building on the previous presentation, which highlighted changes between the old GFR and the new *Filing Manual*, the first part of this session outlined how the NEB intends to implement the *Filing Manual* in the spring of 2004. The *Filing Manual* will be in effect 30 to 60 days after its release.

Details of the implementation plan are still in development. However, the speaker offered a number of ideas about how the NEB proposes to quickly put the new *Filing Manual* into use. For example, the NEB proposes to hold a series of “how to use” workshops for stakeholders to take place during the 30 to 60-day window. The NEB is considering holding Workshops in Calgary, Ontario and Halifax. The speaker requested feedback on several parts of the plan including the timing, format and locations of the workshops.

Because the NEB envisions the *Filing Manual* as a “living document” that evolves to incorporate new issues, legislation, changes in standard practice, and information gaps that may become apparent, future revisions of the *Filing Manual* may be linked to the NEB workshops currently held on an 18-month cycle.

One industry representative asked if the old GFR should still be used for preparing applications between now and the spring of 2004. The speaker replied that the *Filing Manual* is still in draft form and does not currently override the GFR. However, if a company is developing an application at this time, it would be wise to use the *Filing Manual* as a guide. Further, if an application is received by the NEB just prior to the effective date of the new *Filing Manual*, that application will have been prepared under the old GFR but the *Filing Manual* will be used as the NEB’s tool to assess the application. In such an instance, the applicant should either ask for exemptions to GFR requirements that do not exist in the *Filing Manual*, or simply wait until the *Filing Manual* comes into effect before filing an application, thus avoiding the confusion of preparing an application using old rules.

Some members of the audience expressed confusion regarding the transition period between the old GFR and the new *Filing Manual*. How much information should be provided in an application during this period? The speakers responded that any application must still supply the required information at a level of detail sufficient for the NEB to review the project. The *Filing Manual* outlines issues and areas the NEB feels are important

and wants to see addressed in the application. The *Filing Manual* allows the applicant to tailor the application to the size and complexity of the project being proposed. The application should therefore be issues-based; proponents should use judgment to determine the level of detail required to adequately address the issues. Focus on the issues that triggered the application, focus on what is relevant to the project. In addition, the application should mention why there is no information in areas that would normally be required.

Another question was raised regarding the exclusion list for small projects such as repair and maintenance — would the same exclusions and Streamlining Order still apply under the new *Filing Manual*? The speaker again noted that the application should be issues-based and that exclusions and streamlining would still apply. When asked whether the Streamlining Order would be up for review, the speaker confirmed that this was the case. (See discussion on exemptions and the Streamlining Order below.)

Several audience members asked whether the NEB would consider giving company-specific “how to use” workshops for the *Filing Manual*. The speaker indicated that the NEB would be open to that possibility if numbers warrant and schedules can be arranged. Workshops could also vary in content — high-level overviews on process for industry management and executives, and detailed examinations of application content requirements for those who will be developing applications.

If the *Filing Manual* is to be a ‘living’ document, how often will it be updated and how will industry be informed? Small or incremental revisions will likely be necessary for the first year or so after the *Filing Manual*’s effective date to address discrepancies, but large revisions or updates will require a stakeholder review process, the speaker noted. There won’t be any surprises, although the onus will be on applicants to review the NEB Web site to be sure they are using the most recent edition of the *Filing Manual*. A suggestion from the audience that new information or additions to the Manual should be clearly marked as NEW on the Web site was noted by the speaker.

Part 3: Pre-application Meetings Guidance Notes

Chantal Robert

Along with the new *Filing Manual*, the NEB introduced draft *Guidance Notes for Pre-application Meetings*. The speaker highlighted major points in the draft Guidance Notes and invited comments from the floor. She also noted that written comments could be sent to the NEB

until January 16, 2004. The revised Guidance Notes will be released and become effective in February or March 2004.

The purpose of the *Guidance Notes* is to facilitate discussion between the NEB and a project proponent prior to the proponent submitting an application. The pre-application meeting has benefits for both sides. The speaker outlined the process steps for requesting and attending a pre-application meeting. The speaker made it very clear that the NEB cannot provide any party with specific guidance on substantive issues. The pre-application meeting is the opportunity to make contacts and identify the resources (experts and specialists) the NEB will need to effectively review the application. It is not meant to provide the applicant with advice on how to structure the application.

The speaker remarked that, in the past, companies have not been using the pre-application meeting option, but she expected more of these meetings will be scheduled once the new *Filing Manual* becomes effective. In response to a question about whether a pre-application meeting would be helpful in the case of a non-routine application, the speaker replied in the affirmative, adding that a project proponent can share the overall project concept with the NEB at a pre-application meeting; this would be especially beneficial in the case of non-routine or highly technical applications. However, she elaborated, the pre-application meeting is NOT the proper venue to outline substantive issues that will be addressed in the application, as the NEB cannot advise on any substantive issues at any time. The pre-application meeting is meant only as an information sharing session, and a means to identify appropriate personnel for reviewing the application once it is received.

An audience member responded by pointing out that the pre-application meeting would then simply be a one-way “information dump” from the proponent to the NEB with no opportunity for dialogue. The speaker responded that the NEB could achieve some dialogue by directing the proponent to previous information requests that the NEB has made in response to similar applications in the past. The proponent can use these information requests to refine their own application in terms of content and level of detail. The speaker reiterated that the NEB cannot give substantive guidance, but can provide positive or negative feedback on previous applications by the proponent (or others) in an effort to guide the proponent’s application.

The NEB will not use information gained during a pre-application meeting to alert potential intervenors to

issues that will be raised by the proponent’s project and application. Occasionally it might be useful to have legal counsel attend these meetings, but it is not necessary.

Part 4: Section 58 Applications Update Judy Bennett and John Fox

Section 58 of the NEB Act pertains to exemption orders, whereby small projects can be exempted from certain application filing requirements. In its continuing move toward ‘Smart Regulation’, the NEB wishes to streamline the application process as much as possible, especially for routine projects such as maintenance and repair. The NEB seeks a timely and appropriate level of scrutiny based on risk.

The speaker noted that the NEB is currently revising guidelines outlining which projects could qualify for Section 58 exemptions, and of those, which would qualify for further exemptions under the NEB’s Streamlining Order. He said the NEB will consult further with stakeholders in 2004 to develop draft guidelines for review.

In response to a question from the floor, the speaker confirmed that the Streamlining Order is part of the NEB’s review. The NEB is currently concentrating on developing guidelines or regulations pertaining to Section 58, and revisions to the Streamlining Order will be a subset. In addition, the NEB is awaiting revisions to the *Exclusion List* for the *Canadian Environmental Assessment Act*, which will affect NEB revisions to the Streamlining Order.

Nonetheless, the speaker emphasized that the NEB needs to look after the interests of landowners and the environment in determining whether a project qualifies for exemption under Section 58. The speaker further elaborated on the timing for review of Section 58 requirements. She suggested that the next 12 months would be required for this process, including stakeholder participation. The NEB is still identifying the issues and is not certain what the final product of this review process will be. The NEB will contact regulated companies to solicit their input. As stakeholders are identified, their views will be incorporated into the process.

Incident Reporting (two sessions)

Leo Jansen, Ian Naish, Larry Gales and Art Nordholm

In the first of two sessions, representatives of the Transportation Safety Board (TSB) and the NEB highlighted incident reporting requirements under the various regulations and codes, and outlined criteria for reporting based on a selection of incidents and occurrences.

Single window reporting, where all reports are made to the TSB, allows the TSB to collect data for evaluation. It is intended to simplify the reporting procedure for companies. The speaker summarized the protocol for reporting incidents, stressing that all incidents and hazardous occurrences must be reported to the TSB by telephone or fax within 24 hours. The TSB, in turn, forwards the information to the NEB. This meets *Canadian Labour Code* (CLC) regulations for reporting. Reportable accidents, occupational disease or hazardous occurrences include death, explosions and damage to boilers or pressure vessels. Written reports must be sent within 14 days to the NEB for incidents such as disabling injuries, and implementation of rescue, revival or emergency procedures. Annual Hazardous Occurrence Reports for the calendar year must be submitted by March 1 of the following year to the Occupational Health and Safety branch of Human Resources Development Canada (HRDC).

Representatives of the NEB then summarized the roles of the NEB, HRDC and TSB. The NEB's purpose is to promote safety, environmental protection and economic efficiency. It does this by investigating incidents, conducting inquiries, and issuing safety advisories. HRDC's mission is to enable Canadians to participate fully in the workplace and the community. It does so by administering, among other things, the *Canada Labour Code*. The TSB is an independent agency that advances transportation safety through the investigation of occurrences in various modes of transportation including pipelines. Among other things, it investigates incidents,

identifies safety deficiencies and reports publicly on the investigations and findings.

The TSB followed with history and background on its operations. The speaker stressed it is not the role of the TSB to assign fault or liability, but to report its findings fully. He outlined the *Canadian Transportation Accident Investigation and Safety Board Act* (CTAISB Act), highlighting its definition of "pipeline." The definition refers to more than just the pipe and includes compressors, loading facilities, reservoirs and tanks, for example.

After detailing definitions of accidents and incidents as cited in the Act, the speaker talked about reporting requirements. He indicated the TSB's 24-hour hot line number provides a single window for the reporting of all occurrences to the NEB, DOE, RCMP and others. To spark discussion, eight scenarios were presented to the group, each an example of a reportable incident.

One question that arose dealt with the definition of reporting regulations; the TSB says an uncontrolled and contained release should be reported, but the NEB specifies a volume in excess of 1.5 cubic metres. The TSB says any release is reportable to the TSB, even though it might not be reportable to the NEB. Why is there a difference? The TSB is collecting data to gain more understanding on the way incidents happen.

When asked if there is anything that should be reported to the NEB but not the TSB, the answer was "No." The audience raised several increasingly specific examples, asking whether each should be reported. In each instance the speaker indicated that yes, it should be reported. One example is if a company has to take a pressure drop to keep within safe operating limits, is it reportable? Yes, it is reportable upon discovery. When is discovery? The answer pointed to a larger question: is the defect in excess of design?

An audience member asked if TSB reporting applies to provincially regulated pipelines. In fact, it only applies to federally regulated ones, but provincial regulators can request assistance from the TSB.

A question was posed about Item 6 in the *TSB Reporting Regulations* definition of an “incident resulting directly from the operation of a pipeline where... Any authorized activity in the immediate vicinity of the pipeline poses a threat to the structural integrity.” What does the TSB expect and what does the NEB expect in these situations? The speaker gave examples of a near miss, such as with a backhoe or an auger that misses the pipeline by inches. Specifically, he talked about an incident in Toronto where a company was augering holes to put in guy wires and came within one centimetre of a high-pressure pipeline.

Another question was asked if it was reportable if a company finds a historical hit that a third party had done in past. The answer: “typically, yes.” An audience member then asked for confirmation that any contact or near miss should be reported to the TSB and crossing violations to the NEB only. The speaker responded that the TSB passes information to the NEB anyway. That is the benefit of the one-window approach. HRDC regulations say you shall report to the safety officer; if it goes to the TSB it is deemed to have gone to the NEB.

An audience member also asked how many people should contact the TSB after an accident or incident. The regulation says, “the operator and any employee of the operator having direct knowledge of the accident or incident shall report to the TSB...” The speaker confirmed that is legalese – only one person needs to contact the TSB, not everyone on the crew. The TSB asks for the person’s phone numbers for the following few hours, so he or she can be reached once the TSB is on the scene. He stressed the TSB needs to know the event has happened and asked that there be no delay in reporting until all the details are known, as it can impede the investigative process.

More examples were provided to the speaker to clarify specific situations where it is necessary to report. The speaker emphasized they don’t investigate every incident but still like to know about them. Pipeline reportage is significantly lower than other transportation modes. Reportage statistics show:

- Air reports 1,800 – 2,000 incidents per year;
- Rail reports 1,200 – 1,500 incidents per year;

- Marine reports 1,500 – 1,800 incidents per year; and
- Pipeline reports 60 – 100 incidents per year; only two or three per cent of these are investigated.

An audience member asked if they could get an interpretation of the reporting regulation for a specific situation if they called the TSB directly, and the speaker said yes, the TSB would tell the caller whether the specific incident is reportable or not.

Another member of the audience asked for clarification about when detailed incident reports are required – surely not for a five-minute repair job? The speaker said that often the first phone call is considered the preliminary report and then only a final report is needed. From the TSB perspective, a phone call may suffice – or the company may be able to combine reports by indicating that the preliminary report will also stand as the final report. The intent is not to inundate the TSB with paper. Sending electronically is also a good way to reduce paper use.

The TSB was asked if they too are moving toward goal-oriented regulation. The speaker responded that industry will soon be asked to comment on new draft regulations. The TSB plans to make them clearer and smarter, recognizing when a company has a big event they should call immediately, but smaller incidents can be reported on the next business day.

An audience member said they had been audited by the NEB and they suggested that incident management should be part of an NEB audit, so they don’t end up sending in incident reports for smaller items.

The second session was jointly facilitated by the TSB and the NEB. The TSB’s eight-step investigative process was summarized to provide perspective for the audience. It comprises three main steps:

1. Field phase, in which occurrence assessment and data collection occur, and a sequence of events is determined;
2. Analysis, involving an integrated investigation process, risk assessment, defense analysis and risk control option analysis; and
3. Final Board report and safety communication.

A role-playing exercise was then introduced, in which the audience assumed the role of TSB investigator. A brief scenario was provided, based on an actual investigation. It involved the rupture of a pipeline in Northern B.C., resulting in the release of sour gas and a subsequent explosion and fire at the site. The audience broke into small discussion groups to “investigate” the occurrence.

After animated conversation, the audience discussed their experience in the large group. They identified a large amount of specific information they were looking for in their role as investigator, pointing to the lack of information they had been given when they began the role-play exercise. The speaker noted that the information they were given was exactly the information provided to the TSB investigator when he arrived on the actual scene. The speaker reiterated that TSB investigators don't attach blame; they interview and investigate for safety deficiencies, cause and contributing factors. The TSB can then report the good and the bad. The investigations are a learning tool for both the TSB and industry.

A question from the audience dealt with timing for draft TSB regulations. The speaker replied the work was completed about 18 months ago and was sent to a number of regulatory groups for input. The next step is to send draft regulations to industry for comments. No firm date has been established.

Some features of the draft regulations include:

- Emphasis on major incidents;
- Flexibility for reporting minor occurrences; and
- More coordination between the TSB and NEB regarding reporting requirements.

An audience member asked if the Memorandum of Understanding between the TSB and the NEB would be revisited once the new regulations are promulgated. The answer was yes. There is now a working draft.

Integrity Management

Joe Pavigianiti, Kyle Keith and Arti Bhatia

This session provided an overview of the NEB Integrity Management Program (IMP) requirements, offered an example of one company's IMP development and implementation, and gave an update of progress on the Canadian Standards Association's (CSA) IMP standards development. The audience was asked to consider how they define pipeline integrity management and to determine if there is currently enough guidance in the CSA to help develop an IMP, as well as comment on the usefulness of the NEB Guidance Notes.

NEB regulations (OPR Section 40) state a company shall develop a pipeline integrity program. This ensures pipelines are suitable for continued safe, reliable and environmentally responsible service. The Guidance Notes that accompany the regulations provide examples of acceptable practices that could be included in an IMP and its four main components:

1. A management system;
2. Working records management system;
3. Proactive condition monitoring; and
4. Mitigation.

The definition of an IMP used by Foothills Pipe Lines is a formalized document that defines how the integrity of their pipeline system is to be maintained. The IMP should satisfy two overall purposes: best practices and documentation. An IMP must ultimately be designed to mitigate hazards. Using Foothills as an example, the speaker outlined the vital elements of an IMP:

- Hazard identification;
- Management of change;
- Performance measures;
- New technologies ;
- Risk assessment and analysis;
- Data integration.

An overview of the CSA subcommittee on Operations and Systems Integrity was provided. The group is currently reviewing relevant standards and commonalities the CSA could possibly glean for use in its own IMP standard.

About half the audience raised their hands when asked who has worked on IMPs.

The Foothills Pipelines speaker was asked by an auditor in the audience if the company was fairly treated during a recent audit. The Foothills speaker responded that although there were no findings [w.r.t. Section 40 – IMP], he believed they were audited fairly. He added that the audit was deep and challenged his company to justify why they do what they do and to check that the process was documented.

The Foothills speaker was also asked how his company ensures that their operating contractor follows their IMP policy. He responded that the operating agreement doesn't include integrity management. Foothills selects the tools they run, when and where they dig – up until now integrity management has rested solely with Foothills.

A major discussion took place on the NEB's Section 40 Guidance Notes. A question was asked about the authority of the Guidance Notes - are they non-mandatory or in the Code? The NEB speaker responded that the Board doesn't see them as prescriptive. One audience member commented that if industry agrees there is a requirement, then it should be in regulation. He said nobody has a problem with guidelines and he has no problem with the NEB auditing to them. Another audience member added his company thinks the Guidance Notes are useful. They contain items his company needed to consider. Having the Notes become a requirement ensures the issues are considered.

When asked whether the Guidance Notes should stay in Section 40 or move to the CSA, the response was to move them to the CSA. Annexing the Guidance Notes would create a stronger perception of them as non-mandatory – although another audience member pointed out that just because something is in an annex it doesn't mean it can't be mandatory. Audience members appeared to want to preserve flexibility so they can tailor IMPs to their needs. The NEB speaker noted that the word "should" (used in the Notes) is seen as too prescriptive. There is an advantage if the Guidance Notes are with the CSA, because some companies that are not regulated by the NEB have access to CSA information and guidelines.

Another audience member commented that his company was also audited and they developed an IMP. His company took the Guidance Notes as more prescriptive because they were told the audit would be done following the points in the Notes. If they didn't follow the points they would be expected to explain why not. When the NEB speaker asked the audience member what his company used to prepare for the audit, he replied they started with the Guidance Notes, then went to API 1160, then B31.8S because they were more prescriptive.

The NEB speaker then asked what else the audience would like to see in the Guidance Notes. An audience member responded they would like to see retention time for written documents.

Another audience member observed that the needs of upstream pipelines are different from those of downstream operations, and flexibility in the Guidance Notes is needed. Currently the weight of "common elements" in the CSA standards is heavy on the downstream side. The speaker responded that although the emphasis might be different, the main elements are present.

The question was asked if a program doesn't cover all the points in the Guidance Notes, how does the Board deal with it? The speaker responded that the auditor listens to the company's rationale. If it is based on safety, environment and cost, generally the NEB will accept it. The audience member then asked if the audit starts with the Guidance Notes. An NEB auditor replied that auditors start with the company's IMP report and base their questions on what they find in it. If something seems to be missing totally, the auditor will ask about it.

An audience member added that the CSA's Section 10 is well structured. Different firms give information in different ways and consistency is needed so you can compare data over time. Someone else added that in

2007 the CSA will be developing a full pipeline safety management template. The work is starting now.

The Foothills speaker cautioned that including recommended practices is good but we should be careful not to include too many specifics on tool technology since there is no good mechanism for change as technology evolves.

An audience member expressed concern that the Guidance Notes might appear as part of the Code, noting that it is the same 15-20 companies (out of 1,500) who sit on every committee so the Code reflects their expertise and interests.

Landowner Processes

Robert LeMay, Miles I.C. McCall, John Hunt

This session provided information and discussion on the NEB and industry processes for dealing with landowner complaints and how the various processes inter-relate. Speakers from the NEB, Hushion McCall & Associates (a land services firm) and TransCanada PipeLines provided different perspectives.

The NEB landowner complaint process involves two phases: the first phase allows the resolution of most issues at the staff level. For unresolved issues, a second phase involves Board decisions. Approximately 80 percent of landowners' complaints are resolved at the first phase.

The tools available to address and resolve landowner complaints include inspection, information request, site meeting, Appropriate Dispute Resolution (NEB or third party), etc. A tracking system initiated in 1999 has recorded a total of 244 complaints, of which 241 have been resolved to date. Categories of complaints include construction, operation and other (e.g., jurisdiction). The resolution process may take less than a week or as long as 5-6 months. On a few occasions, when issues are more complex, the resolution process may take as long as 6-7 years.

The Hushion McCall speaker discussed land acquisition and construction related issues, as opposed to operational issues. Typical complaints involve routing, safety concerns, construction techniques, and compensation. While the Board does not deal with matters of compensation, compensation is an important part of the early process. The pipeline company ideally should be contacted first by the landowner and should track how the complaint is resolved. However, sometimes the company only finds out after the NEB is informed.

The Hushion McCall speaker advocated a 'Principled Approach' to land negotiation. A company should set out some guidelines on how to treat landowners at the start of the land acquisition process and make sure they

are well publicized. For example, fair and equitable treatment and use of objective criteria for damage claims should be included in these principles. This approach will lead to the effective resolution of problems. The speaker noted that while a chequebook may sometimes resolve an issue, that's not part of a 'principled approach'. Companies should focus on resolving the identified complaint because should a complaint goes to tribunal, both parties lose control and have less ability to influence the outcome.

TransCanada operates over 20,000 km of right of way and deals with approximately 20,000 landowners in Canada. The company experiences a complaint rate of less than one percent. Their approach is based on landowner relationship principles that embody respect and value for landowners' rights to their land. Ongoing positive relationships are encouraged. Safety and protection of the environment are priorities.

The company's landowner complaint process involves the land representative from the start. The land rep contacts the landowner to discuss the nature of the complaint and verify its status. Then he or she enters the complaint into a tracking system. If the issue is not resolved right away, the land rep will prioritize it and handle it his or herself. The land rep is the sole individual dealing with compensation issues, while a reclamation claim may involve other departments. When a complaint cannot be resolved, the landowner may contact the NEB, who, in turn, contacts the company's community, safety and environment department. Another process is then followed.

During the discussion, an industry member asked about what happens when a landowner is not satisfied with a solution. What strategies are there to bring that person back on side and get the problem resolved? What could the Board do?

The TransCanada speaker responded that it is important to have ongoing contact, to identify outstanding issues and work consistently to resolve the issues. Board staff responded that it is important to address and resolve the issue. Trust and dealing in good faith by all parties are part of the solution.

A strongly supported suggestion was made to the Board to post a database on its Web site that would include information about complaints such as location and how they were resolved. Names and other identifying characteristics could be excluded. This would be helpful for companies to learn about successful strategies or to identify if there are local landowner groups focusing on specific issues. Companies could then be more consistent in how issues are handled. Board staff indicated it would bring forward the suggestion for consideration.

Board staff noted that the regulatory process for landowner complaints was reviewed three years ago and requested feedback on how to streamline or further refine the process. There were no suggestions offered at the sessions to improve the Board's complaint process. (Note: The suggestion related to creating the database will be included in the next revision of the Board's landowner complaint process.)

One audience member inquired about the Board's interest in tracking complaints. As indicated in the flow chart presented to the audience, the Board tracks all reportable landowner complaints and ensures that all landowner complaints are addressed. In addition, the Board would like to see companies participating in a similar tracking process. In the future, the Board may have an audit component to the process that will include MIS, tracking and quality control.

A member of the audience indicated that with the Board process, it is possible to have a never-ending cycle if the landowner is not satisfied. The Board representative responded that some complaints do take longer to resolve. However, at some point in the process, the Board might consider the complaint, decide if the company has complied with environmental requirements and Board directions, and dismiss the complaint and close the file, even if a landowner is still dissatisfied. At that point, the Board would send a letter to the landowner and company to indicate that the company is in compliance, that the file is closed and the company is not required to undertake additional activities.

Another member of the audience raised the issue of what happens when there is unauthorized encroachment, for example, when a landowner erects a structure on the

right-of-way. The decision process should be streamlined when there is a clear violation of the NEB Act. The Board staff indicated that those types of issues are handled by inspector officers and are not part of the landowner complaint process. It was noted that the landowner and the company enter into a contractual agreement that is outside of the Board's authority. Activities taking place in the pipeline right-of-way are covered in this easement agreement and it is up to the company to take action and enforce its agreement. However, when a company or a landowner applies to the Board for a decision on an encroachment issue, the Board has to consider all point of views and follow the rule of natural justice. Board staff indicated it would bring the question forward. (Note: The Board inspector officer has the mandate to refine the process in 2004.)

The NEB speaker asked what specific issues other than weather and soil related issues might delay resolving landowner complaints. One audience member indicated that past history between the company and the landowner may cause delays. In addition, lack of resources (work load), prioritization and risk level may also result in delays.

The audience was also asked when industry would identify a complaint as long-term. Response from a few members of the audience indicated that a long-term problem is one where resolution is not likely. TransCanada indicated that the company has an ongoing maintenance and public awareness program and each time they meet with landowners they ask whether there are outstanding issues.

The audience was asked if there were other established landowner complaint processes that were different from the ones described. One audience member indicated that his company screens complaints and if a complaint is very easily addressed by some initial activity, then it is not included in their formal tracking process.

TransCanada added that they track all incidents and complaints in order to determine and address trends. Increases in certain types of complaints would indicate a need to look at procedures or processes to avoid these kinds of problems. This system should result in increased landowner satisfaction and reduced cost for the company.

A discussion also took place on how to deal with very complex situations. A complex situation could involve a group of complaints or a single complaint with a lot of variables. One member of the audience indicated that their company requests a complainant to formalize the complaint in writing if it is a complex matter, rather than just make a phone call. At times, the request to submit

the information in writing will weed out complaints of a less serious nature as well as help formalize and clarify the issues.

One audience member inquired as to what type of training is available for field personnel to deal with complaints. The Board indicated that the International Right of Way Association offers a variety of courses, including a designation program. Topics for training include ethics, dispute resolution and effective negotiation, to name a few. BP indicated they have a new internal general community and public relations program for field staff that teaches general communication principles. That provides one step toward better communication at the field level. The audience was asked whether they are requested by their employers to take part in training programs. A large portion of the audience indicated that they are and do.

A question from the floor also addressed the difficulty in separating compensation issues from other issues, since the NEB's mandate does not include compensation.

TransCanada confirmed that there can be lots of grey areas and that sometimes issues can overlap. TransCanada uses established principles for assessing complaints. Through discussion, the land rep identifies the issues and separates compensation matters from the list of other issues. TransCanada noted that compensation is not utilized as a method of resolving environmental and safety issues.

The Hushion McCall representative indicated similar experiences with overlapping issues. Sometimes a landowner might identify a compensation problem that is really another kind of problem. For example, a landowner wanted compensation for soil drifting, but this was essentially a reclamation problem. Through increased interaction with the landowner, the compensation-based interest became apparent. Money in the landowner's pocket would not likely solve this type of problem.

It was also suggested that companies should use photos, plans or drawings when responding to a landowner complaint – these types of graphics can promote a better understanding of the issue. A photograph can sometimes result in a speedy resolution of a complaint.

Another question from the floor asked if the landowner is involved at the planning/pre-decision stage. The speaker responded that information provided by the landowner and company in relation to a landowner complaint is included in any item prepared by staff for Board consideration.

NEB Operational Improvement

Ken Colosimo

The move toward 'Smart Regulation' is a key strategy for the NEB. Such a shift requires structural changes and integration within the Board, to achieve greater efficiency, a reduced regulatory burden, and better use of personnel and resources. Overall, the goal is to streamline NEB activities while maintaining regulatory effectiveness.

To date, the NEB has begun to develop goal-oriented regulations, especially evident in the new *Filing Manual*. Further, the NEB has streamlined internal processes, consulted with industry on new processes and regulations, and developed a number of documents to help industry understand new regulatory requirements. The NEB has worked with sister agencies to reduce administrative burden and regulatory overlap, especially with the *Canadian Environmental Assessment Act*.

Internally, the NEB is developing a new structure for the Operations Business Unit. Currently, separate teams address major operational activity areas (for example, there is a Construction Compliance Team, an Operations Compliance Team, a Pipeline Audits Team). Teams interact with companies independently. As a result, companies can receive multiple inspections and/or inspections and an audit simultaneously or within a short time period. The current structure can result in high regulatory burden with low economic value.

A new operational structure would better integrate the teams' functions. The NEB's new Compliance Assurance Strategy will be based on cycles of information gathering and analysis, risk assessment and determination, and coordinated, integrated regulatory activities. In particular, there would be greater interaction and information sharing between the teams. The speaker then outlined the benefits for both the NEB and its regulated companies.

The goal of operational improvement within the NEB parallels industry goals, including the use of best practices, operational excellence and efficiency. One

audience member suggested that the NEB consider a management systems structure incorporating clear goals and requirements, measurement of performance, gap analysis and corrective actions, all oriented to improved customer service. The NEB should reflect current industry standards.

The remainder of the discussion focused on audits and inspections.

The speaker indicated that inspections would not cease under the revised NEB operational strategy, but frequency could be reduced depending on the level of risk and a company's compliance record.

An audit may result in the requirement to develop a corrective action plan to address gaps and deficiencies. Under the new operational strategy, there will be greater integration between corrective action plans (resulting from an audit) and regular inspections. Exactly how this integration will be achieved is uncertain at present.

To decrease regulatory burden, it was suggested by an audience member that the NEB examine the cycle of audits and inspections and combine these activities, especially if they are scheduled within a 12-month period. Audits and inspections are costly and time-consuming. The speaker concurred that the NEB is moving toward combining individual inspections for environment, safety, labour, and so on into a single inspection process that would decrease overlap.

The speaker acknowledged that industry currently feels the audit process adds to the regulatory burden rather than decreases it. Once an audit is completed, inspections are meant as verifications that corrective actions have been taken, and that management systems are functioning effectively. Ideally, if management systems are proven effective, the inspection cycle should decrease. If the audit reveals that a company has no major issues

to address, the risk is reduced; therefore the need for inspections (or subsequent audits) is also reduced.

In response to a question about whether compliance assessments will be more intense, the speaker replied that inspections are currently a snapshot, whereas audits are a more thorough examination of management processes. Audits should result in improved processes and practices within the company, leading to reduced risk. Inspections would then be used to verify that practices are in place and that risks are, in fact, reduced. Audits and inspections are not separate but are part of the same process, and present opportunities for feedback, learning and refinement of practices within the company.

There was much discussion on this risk-based approach to compliance. The speaker noted that this approach is integral to operational improvement at the NEB, but it is not fully designed yet. The NEB is working on a model and will invite industry comment, probably in 2004. There was general consensus that a risk-based approach is good and will lead to better use of resources and information.

Onshore Pipeline Regulations

Ken Paulson

This session explored the use of increasingly goal-based language in the development of revisions to the *Onshore Pipeline Regulations, 1999* (OPR). The Board is considering a revision to the regulations that would see the incorporation of a systems approach relying on comprehensive company programs for detailed requirements pertaining to most pipeline design, construction, operation, decommissioning and abandonment matters. This approach could mean the elimination of many prescriptive elements within the OPR.

An audit is now being undertaken to determine the effectiveness of goal-oriented regulation. The audit is expected to be completed by the end of March 2004. The schedule for the development of the new OPR was discussed. A new OPR will involve lots of consultation. A draft might be released at the next NEB workshop in 2005.

Goal-oriented regulations were described. Goal-oriented regulations combine both goal-based and prescriptive elements. Goal-based (or performance-based) regulations define an end condition and leave the means of achieving that end up to the company. Audits are essential to determine compliance and performance indicators are needed to ensure consistency.

The speaker noted that the Canadian Standards Association (CSA) Z662 standard is adopted within the OPR. The OPR evolves with the CSA standard – as it changes so does the OPR. This is different than in the U.S., where standards taken from other sources do not automatically get updated within regulations.

Systems, an important element of the goal-oriented approach, were discussed. ISO has a requirement for discrete elements, while the CSA requires certain programs, e.g., corrosion control, inspection, training, integrity management, although there is no CSA

requirement for a comprehensive pipeline management system. Such a comprehensive system might include records management, integrity management, competency and training, emergency preparedness and response, compliance verification, environmental protection, change management, and safety management programs, for example. These would all be goal-based programs.

The speaker requested input on what should be considered as the process moves forward. What elements should remain prescriptive? What is an appropriate level of regulatory oversight? What should become more goal based? What should be in the CSA? What should be in law? How should the NEB proceed? What kind of consultation is needed?

An audience member inquired whether systems within the OPR will be consistent with ASME B31.85. The NEB representative indicated that he hoped there would be some consistency.

In small discussion groups, the audience reviewed the following scenarios and provided responses to the questions.

Scenario #1

You are part of a large and experienced group of employees that drafts complex regulations dealing with safety, protection of property and the environment. You believe in a goal-based approach, but some colleagues may not be sure. To convince them please explain:

- Why you favor goal-based regulation;
- What steps can be taken to sway your colleagues;
- What risks you face in developing increasingly goal-based regulation;
- What it might take to change your mind.

Comments:

- Goal-based regulation provides more flexibility for companies to meet requirements and allocate resources appropriately.
- Goal-based regulation has the potential to accommodate existing corporate culture. For example, some programs might already be in place.
- Goal-based regulation allows a bottom-up approach. Companies can get buy-in from the field, vs the prescriptive approach, which is very top down.
- A goal-based approach offers flexibility. It avoids the 'one size fits all' approach.
- Easier to adapt to changes in technology.
- A goal-based approach allows regulators to take a more critical view.
- How would you sway colleagues? Goal-based offers the opportunity for incentives. You have involvement with the systems right from the ground up.
- Quantify some performance indicators to show qualitatively and quantitatively that this is better than the prescriptive approach.
- Prove there are some dollar savings.
- Get colleagues more focused on results, looking at accomplishments.
- Risks faced include lack of certainty in meeting regulatory requirements or even the goals.
- Risk of even more administration, e.g., a whole department being added to deal with audits.
- Prescriptive is easy. Goal-based is less of a legal hammer and more difficult to prove one way or the other.
- Goal-based regulation requires a huge upfront development effort for companies. There needs to be more administration and more people. There is the need to develop and constantly re-evaluate programs.
- It is labor extensive.
- There is the need to develop continuity in staff and that is difficult now. People move around a lot.
- A goal-based approach requires extensive financial staff support, either in-house or consultant.
- There may be difficulty in assessment – are we doing the right things, are we doing enough? The regulator might have difficulty making that call.

- There could be potential for miscommunication.
- A goal-based program might be difficult to defend legally and open you to liability if there is a disaster. It won't be an easy task.
- Change minds? A goal-based approach could become more of a burden if we can't prove we can meet the requirements.
- The public might see goal-based as too fuzzy and not providing results.

Scenario #2

You are part of an ad-hoc lobby group that has been formed to right what you see as the erosion of regulatory safety requirements and their replacement with a wishy-washy mish-mash that is dangerous. To convince the regulator that their approach is flawed, please explain:

- Why you are against goal-based regulation
- What steps can be taken to convince the regulator they are barking up the wrong tree
- What values you see in prescriptive regulation
- What it might take to change your mind

Comments:

- We are against goal-based regulation because we see it as the NEB backing away from its responsibility because it is worried about the legal ramifications of the prescriptive approach.
- Profit comes before safety in the pipeline industry.
- Prescriptive regulation has been around for many years and has worked. It creates a fair playing field.
- A prescriptive approach is better for small companies who don't have the expertise or memory. With the current trend for people to job-hop, a prescriptive approach is easier for companies to accommodate, since they don't need the same level of expertise to be compliant.
- Steps to convince regulator? We need to show you how prescriptive regulations work. They are clear-cut, e.g., you arrest someone who breaks the law. When there is failure in a pipeline, the NEB should be there telling the company what to do.
- To convince the regulator, a survey could be undertaken to determine if it is working. Are audit processes creating more problems?
- Look at lagging indicators to see if they are increasing or decreasing.
- Value of prescriptive regulation? You can see

results, e.g., the 55 mph speed restriction in the U.S. decreased accidents and improved safety. With goal-based regulation, anyone could determine the speed they want to travel at.

- The prescriptive approach is clearer, more black and white, and provides consistent application across industry. Resources are more easily justified to management.
- Changing our mind? We want to see third party statistics showing that a goal-based approach might work. The NEB should demonstrate how performance indicators could be used.
- Show us statistics to prove goal-based approach works around the world.

Scenario #3

You are part of an industry association representing major natural gas and petroleum transportation pipelines. To convince the regulator that they need to move rapidly toward goal based regulatory requirements, please explain:

- Why you are for goal-based regulation;
- What steps can be taken to convince the regulator they need to move even faster;
- What values you see in goal based regulation;
- What it might take to change your mind.

Comments:

- There are two key benefits to goal-based regulation: flexibility ('one size fits all' doesn't always work) and the fact that goal-based regulation is more dynamic.
- With the prescriptive approach, it might take years to change unless there is a clearly defined process. Goal-based regulation can be changed more quickly. DOT has a defined process.
- There was no consultation on emergency preparedness and response by the NEB, it was noted.
- Steps to convince the regulator might include looking at other jurisdictions to see how well it has worked and offering statistics.
- You don't want it to go to the highest common denominator.
- Goal-based is more risky from a legal point of view.

Scenario #4

You are part of an industry association representing major natural gas and petroleum transportation pipelines. To convince the regulator that they need to reconsider their seemingly headlong rush toward goal-oriented regulation, please explain:

- Why you are against goal-based regulation;
- What problems have you seen resulting from the rapid move toward a goal-based regulatory regime;
- What steps you might take to convince the regulator they need to look more closely at what they are doing;
- What it might take to change your mind.

Comments:

- We are against goal-based regulation because compliance is more certain for both regulator and industry with a prescriptive approach.
- Compliance is easier for smaller companies who don't have expertise.
- It is also easier to convince management and other regulators.
- Less effort is needed by the company to demonstrate compliance.
- There is less room for error with a prescriptive approach.
- Regulatory staff might say what we spent money on is not appropriate – or change rules in mid-stream.
- Different staff will have different opinions.
- Goal-based regulation is an expensive process that involves training both employees and contractors and preparing for audits. The regulator will be passing expenses on to us as well.
- If only one regulator is goal-based, then we will have to take prescriptive action anyway.
- What problems? The biggest problem is that regulatory expectations need to be clear and they are not now. Easier to convince public on safety.
- Another problem is changing rules and contradictory regulations. There is inconsistency in the interpretation of rules and goals. There has also been a steep learning curve.
- What steps? We could convince the regulator that there is more risk to industry, public and regulator with a goal-based approach.

- We could flood the regulator with examples of how goal-based regulation has not worked.
- To change our minds? We need clear goals and expectations and a clear process.
- We would want the regulator to allow companies to lay out what they are doing and have the regulator approve it.
- There also needs to be guidelines and consistent processes and procedures for auditing.

Scenario #5

You are an engineering consultant and you are fed up with trying to understand what you see as the prescriptive mess of regulations. To convince the regulator they need to look at simplification and a reduction in bureaucratic burden, please explain:

- Why you favor goal-based regulations;
- What problems you have seen resulting from the myriad of regulations you must work with;
- What steps you might take to convince the regulator to take steps to simplify regulatory requirements and processes;
- What it might take to change your mind.

Comments:

- Goal based regulation is a gold mine for us. We get to design different systems for each of our clients – as well as increase our hours by working with regulators.
- We can avoid competing or conflicting jurisdictions – try to get everyone on goal-based.
- What steps? Workshops like this can help – they also increase our billable hours.
- The downside to goal-based regulation for consultants is the liability issue. Risk may fall back to the consultant.

Scenario #6

You are a compliance inspector working for a regulatory agency and are uncomfortable with the removal of prescriptive elements in favor of goals that make it difficult to objectively assess compliance. To convince your colleagues that they need to reconsider the ongoing development of goal-based regulations, please explain:

- What problems you see with a goal-based approach;
- What you might do to change the direction being taken by your colleagues;
- What it would take to change your mind.

Comments:

- With a goal-based approach, it is difficult to determine compliance. Everything is negotiable.
- It is riskier for the inspector and far more complex to do a proper inspection.
- Tell colleagues about the risk.
- Also tell them that it takes more work and harder work to be effective.
- Tell them about additional resources that are needed. They might need different skills or a different knowledge base.
- To change our mind, the potential for career development might be highlighted.
- The degree of risk could be mitigated by providing more training.
- Explain about increased understanding from a goal-based approach; maybe only time will tell about the success of a goal-based approach.

Occupational Health and Safety

Franci Jeglic

This presentation outlined the relationship between the NEB and Human Resources Development Canada (HRDC), as well as provided an overview of *Canada Occupational Health and Safety Regulations* (COHS) and how they apply to the pipeline industry. The speaker stressed that by necessity they are very prescriptive. For many years the NEB and HRDC have had a Memorandum of understanding regarding how they administer the *Canada Labour Code* (CLC) and COHS.

The speaker asked the audience if there were advantages to having Environment and Health and Safety matters in one department. Comments were mixed, with some saying there was no advantage, and others saying it streamlines the process. Very seldom do you see organizations where environmental specialists and health and safety specialists work together, one participant commented. He believed safety takes a back seat to environmental issues.

The speaker noted that NEB health and safety officers are responsible for conducting inspections to ensure compliance with COHS regulations. They undergo rigorous and extensive training to prepare for their responsibilities, including taking courses in fire prevention, legal procedures and investigation techniques, among others.

COHS regulations cover an exhaustive list of workplace issues and areas, for example, boilers and pressure vessels, levels of sound and lighting, tools and machinery, and safe occupancy of the workplace. Employers will be able to file COHS hazardous occurrence reports electronically. Other amendments to COHS regulations include:

- New regulations on ergonomics (currently being prepared);
- New regulations on health and safety committees and representatives (replacement);

- New prevention program regulation (in preparation);
- Violence in the workplace (in preparation); and
- Oil and gas OHS regulations (currently being redone).

A recent client satisfaction survey conducted by HRDC measured overall satisfaction with HRDC services at 66 per cent. The survey indicated that competence of staff (93 per cent) and timeliness (87 per cent) are important to respondents.

Questions and discussion were varied. One person asked whether an Assurance of Voluntary Compliance (AVC) is issued to the employer or the “person” (as described in the regulations) and the speaker clarified that it could be both. Further, when asked what happens if the “person” isn’t under the jurisdiction of the regulations, the speaker said that if the regulation says “employees”, then it only applies to employees, but if it specifies “person”, then it applies more broadly. Persons such as contractors, visitors or sales people on the premises are considered third-party individuals.

Also on the topic of “person”, an audience member asked if there was clear written direction about when a person falls under COHS or OPR. The speaker noted it is not always clear. Mostly OHS matters fall under the CLC, so there may be two sets of regulations covering the same thing. If it is not under the CLC, then it may fall under the NEB Act.

An audience member observed that some of the requirements contradict the concept of one-window reporting. In response, the speaker pointed to one exception: the hazardous occurrences annual report is sent annually to Ottawa, where it is used for statistical purposes. Another audience member said he thought

the report went through the TSB, who would then communicate it to the NEB. The speaker said the practice was to send the reports directly to the NEB, but if they wanted to send them to the TSB that was fine. Discussion ensued, with various audience members expressing their views. An NEB inspector said, in his experience, reports typically went first to the TSB except hazardous occurrences which went directly to the NEB. Another participant said companies want single point reporting. The conclusion was that reports should continue to go through the TSB via phone or fax, because the TSB has 24-hour access to the NEB. The TSB then forwards information to the NEB.

The question was asked whether the new ergonomic regulations will come out as prescriptive regulations and the speaker said he couldn't comment as he had not seen them. In answer to a question about the timing of the new regulations, the speaker said the prevention regulation was completed and had been submitted to the Department of Justice, and the ergonomics one was about two years away from completion.

Performance Indicators

Chris Van Egmond

Performance indicators are measures that can be used by industry to assess their own performance or the impact of improvement initiatives. They can also be used by regulators to assess industry trends and identify areas requiring program development. In 2003, the NEB published its first annual report on safety performance indicators. There is interest on both the industry and regulatory fronts to expand the use of performance indicators and in December 2002, the NEB indicated interest in working with regulated companies to develop integrity performance indicators. CEPA is currently testing draft integrity indicators with its membership. This session discussed the value of performance indicators and was a forum for input on the integrity performance indicators being tested by CEPA.

Between 90-95 percent of companies report safety indicators. The NEB uses these indicators to develop public information on safety issues. Six key safety indicators were selected following discussions with CEPA/CAPP. There were no red flags in data this year, it was noted. A member of the audience asked if safety indicators included construction as well as operations statistics. The NEB speaker indicated that all reportable statistics were included – including construction.

The speaker also noted that integrity performance indicators would be helpful to benchmark companies within the industry and compare them to other sectors. This information would provide a valuable indication to the NEB of integrity management performance in between OPR audits, but would not be used for enforcement purposes.

CEPA reported on its efforts to develop integrity performance indicators. The CEPA effort includes primarily leading indicators. Leading indicators are a measure of effort, including the amount and type of inline inspection programs, pressure testing programs, etc. Most of the indicators used in the past are lagging

indicators representing past performance, for example, frequency and type of failure incident. Other lagging indicators might include a reduction in the total number or total volume of spills. CEPA noted that indicators will evolve with experience. They should be viewed over a span of time (3 to 5 years) and must be measured consistently if they are to be used for benchmarking purposes.

The audience wanted information on the timeline to roll out the CEPA program to members. It was indicated that by the end of 2004 a lot of issues should be resolved and there should be some data available for distribution. An audience member asked whether OPS has potential performance indicators and was directed to the OPS Web site. Some examples of indicators suggested by the OPS were also presented.

Another individual wondered how performance indicators would be tied into the NEB's audit process. How would data be trended? The NEB speaker indicated that it is working toward taking a number of different indicators, e.g., audit results and incident investigations, for example, as risk factors and using these indicators to derive a 'risk value' for the company. These risk values would drive the NEB's compliance assurance program. With a higher risk value number, a company would see more frequent audits and regulatory oversight than companies with lower numbers. This program is not yet designed. The audience asked how this information would be communicated, expressing some concern about making confidential information public.

The NEB speaker asked the audience about other performance indicators, such as environmental performance and safety perception. One audience member indicated his company with two small pipelines in the north deals with issues like permafrost. His company does a lot of monitoring on vegetation, installing siltation fences and drain cuts along the line.

There was also discussion about the CSA effort to develop a risk analysis methodology that could evaluate environmental risk related to pipelines. The NEB speaker asked for suggestions from the audience on how to quantify environmental consequences. Volume of liquid spilled? What can be used to indicate damage to ecosystems or survival of species?

A CEPA representative noted that they have an environmental committee developing environmental performance indicators. The committee is struggling with the issue of whether to focus strictly on pipeline operations or make the indicators broader, e.g., land use, water use. The NEB representative asked if CEPA intends to keep this information confidential or share it with the Board. CEPA indicated it would first share the information with members, but also work with the NEB and other regulators.

An audience member asked whether the NEB indicators would apply only to pipelines or would related facilities be included. The speaker responded that all related equipment would be included. The audience member noted there might be some value in treating facilities separately, since monthly reports are required to be submitted to regulators. These reports already include data that the individual believed were performance indicators, such as sulphur emissions. He noted that it is possible to tailor operations to reduce H₂S and that the factors reported drive operating practice to some extent.

There was concern among industry about provincial reporting and the type of information that would be made public. A CEPA representative commented that it is possible to use performance indicators to benchmark against other agencies, but the Board must be aware of what is in their scope and make sure all the parameters are the same. The Board speaker indicated that the NEB tries to match definitions, but that there is some risk in not comparing apples to apples. (In its *Focus on Safety* report, the Board always defines the differences in how performance indicators are measured by different agencies if they are not 100 percent comparable.)

One industry representative noted that when CAPP does benchmarking they report using categories of companies by size. The Board speaker asked if CEPA plans to report indicators on a tier basis. The CEPA representative said it would be too difficult to do that. Another CEPA representative noted that they are normalizing their indicators on a 1,000 km-year basis. He requested input from the upstream side to see if this is a meaningful way to present the information. With smaller systems, perhaps there should be a different way, he suggested. The

NEB speaker asked if there is potential to use pipeline diameter as another normalizer. CEPA replied that most efforts to normalize data involve volumes, rather than pipe diameters. In any case, it is difficult to address this issue until some numbers are available.

Another audience member expressed surprise that very little had been accomplished since performance indicators were first mentioned in the early nineties. CEPA noted that there have always been indicators, but usually just lagging ones. In the past few years, companies have taken strides in reporting their data and making it public. There may have been lots of data gathered over the past 10 years, but not actual performance indicators.

There was also some discussion about leading indicators in general. It was suggested that leading indicators should be based on need as well as effort. If a pipeline is in good condition, there might be less need to undertake certain preventative programs. The audience didn't believe it is possible to measure the results of effort, but the CEPA representative said that, yes, effort can be measured, but it can take time and more than one indicator is needed. The NEB speaker noted that each company has a program customized to its own operation and risk and therefore it may be difficult to compare one to the other. The CEPA representative was hopeful that some composite number can be developed that would demonstrate trends. In addition, companies will always want to compare their own indicators. One of the most valuable ways to do that is to look at trends over time. Another audience member noted that leading indicators may foretell the future of lagging indicators. Companies should ask if what they are finding as leading indicators would indicate serious integrity problems, for example, if an increase in the number of repairs of a certain type or in a certain location might indicate a serious problem that should be researched.

The NEB representative asked the audience if there was any interest in developing indicators to demonstrate the public's perception of safety. The audience indicated that the only way to gather that kind of information would be to talk to landowners. Landowner complaints or public complaints could be a measure.

Pipeline Environmental Lifecycle

This full-day session was divided into a number of subsets with presentations on specific subjects. The presentations followed the regulatory requirements throughout the life cycle of a pipeline, from planning through construction, operation and abandonment.

Part 1: NEB Environmental Overview Robert Steedman

The speaker gave an overview of the NEB and its role as well as the environmental life cycle of a pipeline.

The speaker then gave an outline of how the day's session would unfold, and noted that these presentations were meant primarily for information rather than dialogue, although questions were welcome at any time.

Part 2: Canadian Environmental Assessment Act: Highlights of Bill C-9 Lanny Coulsen

The *Canadian Environmental Assessment Act* (CEAA) is not specific to pipelines but many of the requirements under the Act pertain to various phases of pipeline planning, construction, and operation. Bill C-9, which proposed revisions to the CEAA, came into force on October 30, 2003. The speaker outlined some of the new or revised provisions of the CEAA.

The principal changes to the CEAA that are likely to affect proponents of pipeline projects include:

- A provision for greater cooperation and coordination between federal and provincial regulators with respect to environmental assessments;
- Explicit requirements for greater communication and cooperation between responsible authorities (RAs) and Aboriginal peoples;

- Explicit mention of the precautionary principle and its use in environmental assessment and mitigation.

The requirement for greater coordination leads directly to the requirement for a coordinating body for each and every environmental assessment. This body will be known as the Federal Environmental Assessment Coordinator (FEAC). In the case of multi-jurisdictional environmental assessments and comprehensive studies, the FEAC will be the Canadian Environmental Assessment Agency. In the case of federal-only screenings, the leading responsible authority will take the role of the FEAC. Thus, the NEB could take the role of the FEAC on certain pipeline projects.

The speaker outlined various other revisions to the CEAA that pertain to screenings (for simple or small projects), comprehensive studies (environmental assessments for large-scale projects), public participation, and the new CEAA Registry. In particular, the speaker noted that it is the responsibility of the FEAC to coordinate the RAs' fulfillment of their registry obligations in a timely manner.

There were no questions or comments after this presentation.

Part 3: Application Information (New Filing Requirements) Karen Blank

This presentation repeated the previous day's presentation concerning the replacement of the NEB's *Guidelines for Filing Requirements* (GFR) with the new draft *Filing Manual*. The speaker emphasized that the same environmental assessment processes are still required for a proposed pipeline project. She also noted that project applications should focus on issues relevant to the proposed project, and should provide information to

a level of detail commensurate with the associated risk. She reiterated that the NEB is still seeking input on the *Filing Manual*; comments must be received by the NEB by January 23, 2004. The *Filing Manual* will become effective in the spring of 2004.

There were no questions or comments after this presentation.

Part 4: Application Processes

Chris Finley, Paul Hess, John Korec and Mieke Vander Valk

This presentation brought further clarity to the requirements for conducting an environmental assessment under the amended *Canadian Environmental Assessment Act* (CEAA), under the NEB Act, and under the *Canadian Oil and Gas Operations Act* (COGOA).

The first speaker briefly highlighted the different roles of the NEB and the CEA Agency (which administers the CEAA). The CEAA's requirements are fulfilled within the framework of the NEB process. In particular, the NEB's new *Filing Manual* contains specific references to the CEAA requirements that an applicant should consider.

The speaker noted that the NEB Act is broader than the CEAA, because the NEB considers other matters such as safety and the public interest in addition to environmental concerns. Some projects that do not trigger an environmental assessment under the CEAA may still trigger the need for an assessment under the NEB Act. This situation particularly applies to small projects, such as pipeline maintenance and repair. Such applications may be filed pursuant to Section 58 of the NEB Act, and may be eligible for the NEB's Streamlining Order.

The next speaker concentrated on the integration of the newly amended CEAA into the NEB process. The three amendments to the CEAA that have the greatest impact on the NEB process are:

- The new CEAA Registry – when the NEB receives an application, it must post the project on the CEAA Registry. The project must be publicly posted for a minimum period before a decision can be rendered. In the case of screenings (small projects), the period is 15 days. In the case of comprehensive studies (large projects), the period is 30 days.
- The handling of comprehensive studies (full-scale environmental assessments) - under CEAA there is a new provision for engaging the public early in the environmental assessment process, and follow-up programs are now mandatory.

- The establishment of a FEAC role for every environmental assessment and comprehensive study. This role falls to the NEB in the case of screening projects.

In addition, the *Species at Risk Act* (SARA) now specifically requires that applicants consider species at risk in their environmental assessments. The NEB process has always included the consideration of species at risk. Now the process is more formalized and the NEB *Filing Manual* has been revised accordingly.

The NEB has developed an environmental screening template to conduct “smaller” project assessments. Initiatives are underway to make this template suitable for larger project assessments. The NEB is also revisiting its internal processes to accommodate changes to the CEAA.

Speakers then outlined the environmental assessment (EA) process in Frontier and Non-accord lands focusing on EA within the Northwest Territories. Within these areas the NEB administers the COGOA and applies the CEAA and appropriate sections of the *Mackenzie Valley Resource Management Act* (MVRMA). The NEB also participates in the review processes as outlined by the Aboriginal groups such as the Inuvialuit. Overlapping and parallel regulations result in complexity. The NEB is considering preparation of guidance documents for applications to conduct oil and gas exploration and production in Frontier and Non-accord lands.

Questions from the audience focused on the need to post a project on the CEAA Registry for the required time period. The speakers replied that it is the NEB's intent to post a project on the registry as soon as an application is received. They noted however that the application must contain sufficient information for the NEB to properly scope the project and determine whether the 15-day or 30-day posting period should apply. The new *Filing Manual* should facilitate proper scoping.

Part 5: Post Approval Requirements

Maureen Mitchell, Tracy Young, Alison Farrand and Sandra Martindale

Once a project has received approval, the NEB continues to track it through the construction and operation stages. The NEB tracks between 300 and 500 projects in the post-approval stage annually.

A project approval generally takes the form of an Order or Certificate, to which standard and project-specific conditions are attached. One of the standard conditions is that the company must report on its own compliance

within 30 days of completion of the project. Within those 30 days, the company must submit a compliance letter to the NEB, stating that the project is complete and in service, and confirm whether the company has complied with all conditions on the Certificate.

If a company cannot meet an approval condition, then it must apply to the NEB for a variance. It is important for a project proponent to set out achievable goals. Having a goal-based environmental protection plan allows greater flexibility in environmental management, thus reducing or eliminating the need to apply for variances.

Compliance with conditions is monitored through inspections. Inspections are also a means of ensuring that the company's field staff know their roles and responsibilities.

An environmental protection plan is integral to addressing issues and achieving compliance. It is a project-specific document that is a compilation of the environmental commitments made during the application process. The purpose of an environmental protection plan is to effectively communicate environmental protection requirements to field staff and contractors.

Environmental follow-up and monitoring also play a part during the post approval phase of a project. A follow-up program verifies the accuracy of the environmental assessment performed prior to the project, and determines the effectiveness of any mitigative measures undertaken. The speaker noted that follow-up is discretionary for screening-level environmental assessments, but is mandatory for all projects that trigger comprehensive studies. Follow-up programs are designed to specifically test predictions of the environmental assessment and the effectiveness of mitigation related to a specific issue. Monitoring programs cover a broad range of issues related to a project, such as reviewing the effectiveness of mitigation, as well as address unanticipated issues or effects. Good follow-up and monitoring programs and reports assist all stakeholders in learning and adapting. A description of what an environmental monitoring report should contain has been included in the NEB's *Filing Manual* for projects where a monitoring report must be filed with the NEB.

A question was raised regarding how quickly the NEB could respond to a request for variance. The response time varies, depending on the complexity of the variance. Communication between the company and the NEB is vital in receiving a timely variance approval.

Discussion then focused on the 30-day compliance period, and what constitutes "material non-compliance". Strictly speaking, a project proponent needs to meet the approval conditions exactly; otherwise the company is technically in non-compliance and must apply for a variance. This situation points to the need for the company to set out achievable goals in its environmental protection plan, as part of its application. Exactly when the 30-day "clock" starts may vary. In most cases, the NEB uses the in-service date as the start of the 30-day compliance period. Another NEB representative responded that in cases where the project consists of sampling (e.g., for contamination), the 30-day period begins when all analyses have been received and the company is confident that the project is complete.

With regard to monitoring and follow-up reports, the speakers asked the audience for feedback as to how the findings from the reports can best be passed on to applicants and the public. A response indicated that the monitoring reports are not currently available in the NEB. A suggestion was received from the floor that the reports be made available at the NEB library and NEB consider publishing an annual report of key findings.

NEB representatives confirmed that as-built construction alignment sheets in monitoring reports are very useful for the NEB's field inspectors. If the field inspectors have good information they can quickly locate problem sites long after construction is completed.

Discussion turned to field inspections. With regard to the legal standing of NEB inspectors, the speaker responded that an NEB inspector who noted an environmental problem would be duty-bound to report that problem to the proper authority. For example, someone doing an inspection who noted a fish kill would be duty-bound to report the environmental damage to the responsible authority.

A questioner from the floor asked whether the NEB could require monitoring reports to be filed electronically so that they could be shared more easily. The speaker noted that the NEB could encourage electronic filing of the reports, but for the time being this will not be a requirement.

Part 6: Managing Spill Site Contamination

Catherine Watson and Jamie Kereliuk

This presentation introduced a new procedure to manage spill sites, and the speakers solicited comments and feedback from the audience.

Currently the NEB is aware of a large number of spill sites that are in various stages of remediation. When a spill or other incident occurs, it is inspected from health and safety perspectives but to date there has been no formal “close out” procedure to deal with environmental issues.

The NEB has proposed a new process that will bring closure to spill sites from an environmental standpoint. The new process will also encourage collaborative site management with other authorities. The process will provide certainty and will establish clear goals for managing the spill site.

The new process will take a lifecycle approach to managing a spill or incident site, from initial reporting to controlling the spill, containment of spilled materials, remediation of the site, monitoring, reporting, and close-out. However, the speaker noted, a company’s future responsibility for remediation will not be relinquished or extinguished when the NEB declares a spill site “closed out”.

Under the new process, an NEB environmental specialist will review the company’s mitigation and monitoring plans, review monitoring reports, and consult with other authorities as needed. The Board intends to develop a series of standard letters to accompany each stage of spill site management. The NEB will also improve the current spill site database to facilitate efficient tracking.

The NEB will obtain feedback on the proposed procedure, develop draft guidelines for comment, and implement the procedure some time in 2004.

An audience member noted that some spills are very small and asked if all spills will be subject to this new procedure, regardless of size. The NEB speaker responded that the procedure will be based on the minimum reportable volume of a spill, which varies depending on the liquid or material in question. However, the NEB will take a risk-based approach to spill management, regardless of the volume or size of the incident. The criteria applied will depend on volume, type of material, location, and other factors. The NEB is in the process of developing these criteria, and will work with other jurisdictions in this regard.

A question was raised as to whether the NEB would stipulate acceptable waste sites for the disposal of contaminated soils and other materials from a spill site. The speaker replied that the NEB had not considered this aspect and will do so when developing procedures and guidelines.

In response to another question, the speaker indicated that the proposed procedures are not meant to be retroactive but the NEB would examine and “close out” old spill sites if a company so requested.

An audience member noted that this new procedure could have benefits to companies by reducing long-term liability at spill sites.

Part 7: Environmental Protection Program Audits

Stephen Pierce, Linda Postlewaite
and Daniella Pacifico

The NEB has undertaken 21 audits over the past three years. Of the findings arising from these audits, 23 percent pertained to environmental program elements. Through the audit process the NEB found that strong environmental protection programs and policies are well established within operating companies. However, training, awareness and demonstration of competence can be lacking. Many pipeline companies are still in the planning and implementation stages of program development, and lack internal audit programs. Key elements of a company’s environmental protection program must be communicated, understood, and practiced.

The NEB speaker indicated that ISO 14001 sets a reasonable standard for an environmental management system, but companies are free to design their own systems and programs. Such programs should include:

- Clear policies and commitment from company management;
- Planning;
- Implementation, including training of field staff, and documentation;
- Checking and corrective actions to facilitate continuous improvement; and
- Management review of performance.

The speakers responded to several questions from the floor. The first of these was: Why would a company want to share the results of an internal audit with the

NEB? The speaker replied that the NEB seeks assurance that an internal process exists, the goal of which is to promote continuous improvement and to protect the environment. The NEB also wants assurance that the company has the “big picture” in terms of overall management programs and is not just addressing project specific problems.

The audience was formed into small groups to discuss and report on a series of trigger questions posed by the speakers. The questions included:

- Is ISO 14001 a reasonable model for designing environmental protection programs?
- How successful are the OPR-99 Guidance Notes? (These Guidance Notes, as revised in January 2003, suggest components for an environmental protection program.)
- How can a company best demonstrate that their environmental protection program is adequate and effective?

Regarding the three trigger questions, the audience responded as follows:

- Some kind of model, guide or standard is needed for continuity and certainty. ISO 14001 is an appropriate model but companies need flexibility to develop their own programs. ISO is viewed to be very prescriptive, and could be considered contrary to the NEB’s goal-oriented and risk-based regulatory style. However, ISO is internationally recognized and no one was aware of a superior model for developing environmental protection programs at this time.
- OPR-99 Guidance Notes are comprehensive, the goals and regulations are clear and concise, and terminology is clear and relevant. However some audience members felt the Notes are too comprehensive and don’t leave companies enough flexibility. Also, the NEB seems to use Guidance Notes as its basis for auditing, even though the document is meant only as guidance.
- The notion of “adequate and effective” leads to a deeper question: do all sides truly understand goal-oriented regulation? Is environmental protection truly quantifiable or is “protection” a relative term that can only be assessed in qualitative terms? There was no further discussion on this point.

The speakers collected written comments and invited further dialogue.

Part 8: Abandonment, Decommissioning and Deactivation

Scott Gedak

The NEB is moving to refine the Act’s definitions and the associated regulations that deal with the final phase in the life cycle of a pipeline.

- “Abandon” is not a new category but has a new definition: “the permanent cessation of the operation of a pipeline which results in the discontinuance of service.” Abandonment applies to an entire system including pipelines and facilities.
- “Decommission” means “the permanent cessation of the operation of a pipeline without the discontinuance of service”. This is a new term, distinct from abandonment because there is no discontinuance of service. Typically this situation would apply to the removal of a section of pipeline from a system; the term is aimed at smaller projects. This situation would trigger an application for “leave to decommission”. The NEB is soliciting further discussion and input.
- “Deactivation” is an existing provision, meaning “to temporarily remove from service”. The NEB is not contemplating changes to this term or the associated regulations.

In response to the question, “What incentive does a company have to abandon?” the speaker replied that such a decision is up to the individual company. In some cases the provincial rules on abandonment are onerous, forcing many companies to hold lines in a “suspended” state. To date there have been few applications to the NEB for abandonment, though this is likely to change as large projects age. It may be the intent of the new decommissioning provision to allow some amount of line abandonment while ensuring that long-term environmental and other risks are addressed.

Pressure Equipment Management

Franci Jeglic

The speaker noted that industry may play a significant role in developing programs for managing inspections of pressure vessels and pressure piping, although the regulatory function will remain with the NEB. Certain services will be provided on behalf of the NEB by the provincial authorities. These functions and roles are described in the non-mandatory Guidance Notes for Pressure Vessels and Pressure Piping and Guidance Notes for Pressure Vessels.

Regulations for pressure vessels and pressure piping now fall into two NEB regulations: *Onshore Pipeline Regulations* (OPR) and *Processing Plant Regulations* (PPR). The roles of the NEB, provincial or territorial authorities and industry were described. The NEB will review applications for new facilities, relocations, sales or leasing, leave to open and abandonment. The Board will also inspect, audit, review programs and update the regulations. The provincial authorities register equipment design and specifications and welding procedures, determine boiler operator equipment inspector qualifications, certify pressure welders, issue annual operating certificates and inspect equipment. Companies will file applications with the NEB and comply with the OPR and PPR as well as Part V of COHS Regulations dealing with boilers. Companies are also required under the NEB regulations to develop programs for the design, construction, operation and abandonment of pressure vessels and pressure piping and submit these programs to the Board.

Guidance Notes have been developed to accompany the regulations. These Notes give companies a choice to follow the prescriptive requirements or to develop a risk-based inspection management program. The Guidance Notes indicate that an inspector can be recognized by any province or territory or by the National Board of Boiler and Pressure Vessel Inspectors. The audience was asked who is inspecting their pressure vessels now. Most indicated that inspectors were

provincially recognized and follow provincial regulations. The speaker noted that it is the role of the NEB to oversee the work of the provincial inspectors.

The NEB will sign Memorandums of Understanding (MOU) with the provinces for services that provincial authorities will provide on behalf of the NEB. The speaker described a current pilot project to develop an MOU with British Columbia. The MOU will set out the NEB and provincial responsibilities for pressure vessels and piping and is expected to be completed by year-end. MOUs with other provinces are expected to be completed within a year.

It was noted that if the provincial authority determines the qualifications for inspectors under the new regime, companies will not be able to use one inspector for interprovincial pipeline systems. The speaker responded that since MOUs will be negotiated with each province, it is not likely that there will be major differences in qualification requirements from province to province. Audience members wanted the same qualifications across the country.

An audience member questioned where inspection reports will be submitted under the new regime. It was indicated that inspection reports on federally-regulated facilities will be submitted to the NEB.

The NEB was asked if the federal government has other MOUs with provinces for other industries. The speaker replied that yes, there are other MOUs, noting that there are arrangements between Public Works Canada and the provincial boiler branches to take care of boilers in federal buildings. It was then asked if the NEB could lever off other MOUs. It was explained that the nature of the agreements are usually quite different – for example in the case cited above, Public Works owns the boilers, while industry is the owner of facilities in the situation under discussion.

An audience member noted that Saskatchewan, Alberta, and B.C. government representatives were not in attendance and that the NEB is in uncharted territory. Could CEPA be engaged somehow? The speaker indicated that while the Boiler Branches representatives were not in attendance at the workshop, their chief inspectors are well organized and have their own meetings. The NEB has attended these meetings to provide information about these changes. The CEPA representative requested an opportunity to review the MOU before it is signed and was informed that there would be an opportunity to do that once the technical aspects were ironed out.

Another audience member asked if federally regulated companies would get a copy of the MOU. The speaker replied that they will get copies and that a presentation would be made as well. There was also a question about whether the northern territories would be involved in the MOU process. The speaker indicated that yes, they would be involved.

One audience member was curious about the definition for pressure vessels and was told there is a definition in CSA B51 standard. There was also some confusion about what constitutes pressure piping within a pumping or compressor station. It was noted that companies can design the piping in stations as pressure piping or pipeline. In the Guidance Notes, piping in stations is considered pipeline – and there is no need to register it.

Regulations for boilers that come under the *Canada Occupational Health and Safety Act* (Part V) were explained, including inspection requirements. It was noted that Part V is prescriptive and no exemptions are permitted. The audience was asked if regulations for boilers should come under the NEB. Most agreed. An audience member questioned clarification on an aspect of Part V and the frequency of inspection for waste heat boilers. Another audience member asked if there were any timeframes for moving boilers over to NEB jurisdiction. It was indicated that since Part V was recently rewritten, it may be a while before any more changes will be made. A letter from the NEB could be filed with HRDC that will wait until Part V is reviewed again.

In conclusion, it was noted that the new regime provides increased flexibility for industry, allowing companies to develop their own inspection programs and to ask for exemptions. Neither of these are options for boilers.

Processing Plant Regulations

Bruce Maher

This session reviewed the requirements of the *Processing Plant Regulations* (PPR) as part of the shift to goal-oriented regulation. With the promulgation of the PPR on January 2003 and the completion of the PPR Guidance Notes in the summer of 2003, it is now important that company management systems address the requirements to develop and implement programs for the design, construction, operation, and abandonment of processing plants. The session identified the required programs as well as the need to assess them through self-audits and inspections.

Relevant sections of the regulations and Guidance Notes were reviewed. The speaker indicated that the following programs must be developed:

- Pressure equipment – mandatory submission of program to NEB;
- Quality control and quality assurance;
- Safety;
- Environmental protection ;
- Inspection and testing of welds – mandatory submission of program to NEB;
- Safety of visitors;
- Education of emergency personnel;
- Integrity management;
- Company training;
- Company audits;
- Record retention and management.

During the discussion that followed, a number of companies indicated that they are already working on drafts for some of these programs. An audience member asked for confirmation that auditors would determine whether a program is adequate or not.

It was pointed out that many companies are not embracing ISO 14000 and the NEB speaker was asked whether the Board would require ISO 14000 as a standard for environmental protection. The speaker replied that Guidance Notes are only Guidance Notes and that there is no requirement to follow ISO 14000 – or ISO 9000 for that matter, either. Companies can set up their own systems. They only need to demonstrate that the goals are being achieved. The speaker agreed that auditors may be following ISO 14000 too closely and may need to modify their approach.

Another discussion took place about programs to evaluate staff effectiveness and competencies. One audience member wondered about ways to evaluate supervisory and trades people. Others responded that annual performance reviews could be used in the case of supervisory personnel, while the requirements for certification could be used for trades people. The NEB speaker indicated that it is up to the companies to come up with a way to evaluate staff. Such programs could be different from company to company. The speaker indicated that the Board expects companies to explain their thinking in the development of such programs. The speaker also noted that similar questions were in the session on emergency preparedness.

One audience member raised the point that the *Privacy Act* which becomes effective January 2004 will limit the ways companies can use employee information. The Board replied that there is no requirement to divulge an individual's personal information. Auditors do not use names of individuals in their reports; their intention is to review the system or program as a whole.

It was also noted that the PPR seemed to overlap with other regulations with regard to developing an operations program for pressure equipment. The speaker agreed that there may be overlap with other regulations and that companies only need to reference these programs in their documentation. No duplication is desired.

Safety Programs (two sessions)

Karen Duckworth

In the first session, the speaker outlined regulatory expectations for safety programs, noting that all provinces, territories and federal workplaces require a safety program except for Alberta, which has incentives to encourage companies to implement an auditable safety program. The speaker could not find a reference to New Brunswick requiring a program. The NEB also requires a safety program under the *Onshore Pipeline Regulations* (OPR) and the *Processing Plant Regulations* (PPR).

A typical safety program includes a policy statement, education and training requirements, incident investigation, reporting, corrective actions and statistics, records and document control, etc. The NEB uses a systems approach to guide them through the safety program audit.

While most companies have very good safety programs in place, the speaker cautioned that companies may often become complacent as their programs mature, causing the effectiveness of an otherwise adequate program to diminish. NEB audits have revealed the following gaps:

- Communication: the best safety programs demonstrate a fluid, two-way communication between management and workers. However, communication between head office and field is not always taking place.
- Documentation of programs: often Auditors are not seeing improvements or evidence of corrective action, due to inadequate documentation.
- Inspections: internal inspections are ineffective and not well documented.
- Training: essential training is not taking place soon enough for new employees, and is often not documented with current certificates. In many cases, the training is taking place, but not being documented.

- Hazard identification and analysis: even though the analysis may be excellent, there may be no documented process in place or the process is deficient. Typical elements requiring hazard identification and analysis include asbestos, silica, PCBs, mercury and naturally occurring radioactive materials.

An NEB staff member suggested companies could invite NEB representatives to one of their quarterly safety meetings to gain a better understanding of the issues being faced by the company. The NEB could also consider making a presentation at the meeting. An industry representative noted he would like to see a streamlined audit process, as everyone is resource constrained and it would be easier to answer all the NEB's questions at one time.

The question was raised whether audits would replace site inspections. The speaker noted that the Board intends to integrate audits and inspections in the future, when possible. Eliminating inspections is not an option due to the Board's responsibilities under Labour Canada to administer the *Canada Labour Code*. Further, inspections are an important component of audit verification and confirmation. The NEB is looking at consolidating the audit and inspection processes when possible, so more site inspections could be conducted while an audit is underway, providing, for example, field verification to support the audit. However, some inspections will still occur independent of audits. Construction inspections have different risks and requirements compared to operations inspections and so will still need to be conducted independently.

Regarding the training of auditors, the speaker noted that if companies plan to implement a new process or system, it would be beneficial to have Board auditors participate in any accompanying employee training program so they can become informed. Also, if companies are conducting training sessions, NEB employees could participate in the

training. The NEB would pay their own costs. This was suggested as a means of “pooling resources”.

The speaker then presented preliminary Safety Performance Indicators for 2002. An audience member, after viewing a graph showing right-of-way crossing violations, asked if the NEB tracked violations in the 30-metre safety zone. He observed that if there are incidents in the safety zone, eventually there will be an incident in the right-of-way. The speaker responded that the NEB is currently only tracking incidents in the right-of-way.

A further question was asked about whether any of the right-of-way violations were caused by abnormal farming operations, such as deep tilling. The speaker said that, to her knowledge, there were none in 2002. A check of the statistics indicated that no incidents were reported to the Board as a result of abnormal farming operations.

Safety Programs, (second session)

Jennifer Stanier, Don Burke
and Vic Standish

The second session on safety programs focused on NORM – naturally occurring radioactive materials – that are part of the natural environment and can become a potential health risk when they are concentrated as a result of certain production activities, according to the Alberta Energy and Utilities Board (EUB) speaker. The EUB is currently investigating how to regulate NORM.

There are three types of radiation emission by NORM: Alpha and Beta Particles and Gamma Rays (electromagnetic energy). Industrial processes such as oil and gas production, mineral extraction and thermal-electric generation create higher concentrations of NORM. The speaker noted that even more important than determining where NORM come from, is seeing where they go. Deposition points in oil production include equipment scale (pipes, pumps, treaters) and vessel sludge (storage tanks, slop tanks) but not all scale contains NORM. In gas production, deposition points include internal surfaces of propane bullets, and pipes in the systems of gas processing equipment.

Detecting NORM requires special equipment. Without personal protection equipment (PPE), radiation is a potential health risk, either by inhalation or ingestion, or by exposure of skin or tissue.

Currently there are guidelines in place to manage NORM, both federally, and in three western Canadian provinces. Although there are no EUB regulations on managing NORM waste, there is an expectation that it will be disposed of properly.

The speaker outlined the work of the NORM Waste Management Technical Committee, formed with members from government and industry to develop a waste management policy. Specifically, the committee is investigating safe handling, storage practices and disposal options. Although NORM waste exists at upstream sites, quantities and specific locations are not well known. EUB

licensees are responsible for identifying NORM to ensure worker safety and appropriate interim handling and storage until a waste management policy is developed.

The representative from Conoco-Phillips outlined his company's experience with NORM. Conoco-Phillips has learned that the best defense against gamma radiation is to limit exposure, for example by changing filters more often, and by placing time and area restrictions on staff. Their experience is that gamma levels drop quickly following propane production. Monitoring staff with dose badges has shown that most workers are under the yearly exposure limits – often no higher than background readings. Therefore Conoco-Phillips is not all that concerned about gamma radiation. For the company, alpha and beta radiation are more of a health concern because if they are inhaled, they continue to bombard the lung tissue over a long time. There is no serious external hazard for alpha and beta radiation. The company has developed a series of protocols for protection from alpha and beta radiation:

- Control the work environment;
- Wear appropriate PPE;
- Dispose of waste and contaminated PPE in a proper manner; and
- Practice good personal hygiene. (Of particular importance is using masks or respirators, depending on the level of NORM present.)

The speaker noted that testing for NORM has become as common as testing for combustible gas; when testing for hazards staff take both a gas detector and a NORM monitor.

An audience member asked about the NEB's plans to regulate NORM. The NEB speaker said it is a relatively new issue and the Board is currently in the information-gathering stage. Regarding hazard identification, NORM are not considered to be

any different than other hazards. Regarding on-site monitoring, the Board is not yet dealing in specifics but brought the potential for a blanket consideration up for discussion. The speaker said as a minimum, NORM should be included as part of hazard identification.

Another member of the audience mentioned that his company hasn't found NORM to be much of a problem. He noted that his company had experienced increased levels in the early 1990s, although they were very small elevations. His company still monitors for NORM once in a while, and he is considering doing more monitoring.

The Conoco-Phillips speaker said NORM are more concentrated in propane, but the company has also found them in the filters in their natural gas plant. The level was slightly more than twice background, so it had to be treated as NORM contaminated. He noted that over time, the threshold of twice background will eventually be exceeded.

Another audience member said after his company checked throughout their system, mainline and a number of gathering locations, the only place they found twice background level was in filters. As a result, he would be hesitant to have specification requirements to deal with an entire system. Instead he believed NORM should be monitored only in high-risk areas, but not in the entire system when there is no expectation of occurrence.

The question was raised whether NORM are prevalent on the east coast or in Ontario. The EUB speaker noted that even in Ontario it is spotty. He observed that if we knew where it came from, it would be easier to monitor.

There was no response to the question of whether liquid operators had found any NORM. The EUB speaker pointed out that NORM will mostly show up in production water or when different waters are commingled. Further, if you have scaling in the barium sulphate on an older producing field, a flag should go up. Again he emphasized the need to focus on the high-risk areas rather than everywhere. The Conoco-Phillips speaker added he believes NORM should be treated like any other workplace hazard. He suggested individual companies should deal with it rather than inventing more regulations.

TSB Investigative Process

Lawrence Gales and Art Nordholm

This session told the story of the Transportation Safety Board (TSB) by detailing its history, its mandate, its role, and how it works. This independent federal government agency's sole objective is to advance transportation safety for pipeline, rail, marine and air transportation. The TSB does not assign fault or liability but also does not refrain from reporting fully because fault or liability might be inferred from its findings. It is different from the NEB in one important way: all TSB reports are public documents and are posted on the Internet once the investigation is completed. The TSB was established 13 years ago.

Once the TSB begins an investigation, no other department except the Department of National Defence can also investigate the transportation occurrence. For example, the NEB is prohibited by law from investigating an occurrence if the TSB has already begun to investigate it.

Pipeline occurrences (called incidents by the NEB) are defined as any accident or incident associated with pipeline operation, or any potential accident or incident. These "occurrences" are further separated into accidents and incidents, depending on the severity; accident being the more serious of the two.

The TSB, via its 24-hour telephone hot line, offers a single window to report all occurrences to other agencies including the NEB, DOE, RCMP and Emergency Measures. The TSB passes relevant information along to the other agencies. While the historical approach to accident investigation has been to focus on immediate causes, the TSB investigators now prefer to drill deeper and understand why an accident or incident has occurred. Its eight-step investigation process involves field work, analysis, and communication of findings. The speaker detailed each of these steps, highlighting the objective and key activities for each step. For example, in the data collection phase (step two), the objective is to collect and evaluate pertinent information, a process

that includes a data collection plan, ongoing analysis, identification of potential safety issues, and a systematic approach to data collection.

The final step, Safety Communication, concludes the investigation by ensuring safety deficiencies and associated risks are effectively communicated by the right people, to the right people. As well, a final Board report is prepared and released to the public. This process takes approximately six months. The speaker was careful to note that although the report is released to the public, investigation interviews and any other confidential materials are protected.

A question was raised about the political implications of investigating accidents or incidents. The speaker responded that certainly there are political influences in which accidents are investigated; if a pipeline ruptures on the property of the Minister of the Environment, the TSB will definitely investigate it! The TSB reports to Parliament, with the report read in the House of Commons each year.

Another audience member raised the point that a letter was recently sent to pipeline companies asking for information about an emergency procedures manual. Why was this letter sent, wondered the speaker, when companies are not supposed to hear from the TSB unless there is an accident? The TSB speaker responded that the TSB was requesting this information to update its information database, which it does periodically. The last time it was updated was 1991. The questioner said it seemed the amount of information requested was too much and the TSB would ask for it again in the event of an accident. The TSB speaker noted that the information helps them when they get a call about an accident. Another audience member observed that the same information is on file at the NEB and asked if there was any mechanism in place to share or update that information. The TSB speaker said NEB information

is kept completely separate from the TSB, and when the call comes in to the TSB it is important to access information quickly and respond appropriately.

Another audience member commented that when he first read the request for information letter it seemed that the TSB wanted detailed drawings. Most of the information requested is in the emergency response manual; would that suffice? The speaker replied it probably would, but no two emergency response plans are the same – some have no details about their facilities. He summed up, saying the letter was meant to be a guide.

Emergency response manuals are on file at the NEB, noted another audience member. The speaker said the TSB receives some manuals but not from all companies. The TSB is updating its information, so it would be helpful if companies had a quick review to ensure the TSB has the right information.

On another topic, an audience member asked what compels a company to report, if the TSB only investigates if an occurrence is reported – and what happens if a company doesn't report? The speaker answered that the regulations say companies are required to report, and if they don't, there is a penalty. The questioner also asked when a company makes changes, for example to operating pressure or to diagrams, whose responsibility is it to update the information – does the TSB ask for updates or is it the company's responsibility to report? The speaker said it is a monumental task to keep records up to date, and it is important to know information such as where each company's facilities are and where they run.

When asked if the TSB acknowledges receipt of such information, the speaker replied yes. A follow-up question dealt with whether the information is for the public record. In fact, it is kept confidential if it deals with specific and detailed information regarding the company.

Several questions about incident situations were presented to the speakers, asking whether each should be reported. For example, is it reportable for precautionary shutdowns to do hot work. The answer is yes, if it is an unintended event. The speaker stresses that if companies are not sure whether an occurrence should be reported they should call the TSB to confirm.

A question was raised about a third federal body – Natural Resources Canada (NRCAN) – and where it fits into the regulatory scene. It was explained that NRCAN is primarily intended to look at pipeline security. After 9-11 the security of Canada's pipelines is equal to that

of American and Mexican ones. To further clarify, the speaker reiterated that no other agency has the power to investigate, according to the Act. However, if the TSB is not conducting an investigation, then NRCAN would have the power to do so.

The Path to Smart Regulation

Introductory Remarks to Workshop 2003
Tuesday, 02 December 2003
Calgary, Alberta

Kenneth W. Vollman
Chairman, National Energy Board

Introduction

Good morning. Welcome to the National Energy Board 2003 Workshop. We are very excited about this event and are very pleased with the interest expressed which today is clearly evident by your attendance. As of last night, we had more than 350 registrants representing a broad cross section of NEB stakeholders.

Let's talk about our expectations for this Workshop. Over the next three days, you will be participating in discussion on topics ranging from pre-application meetings to pipeline abandonment. We intend to tap the knowledge and experience in this room and use it to initiate, refine and develop regulatory processes and initiatives that will continue to provide favourable conditions for the physical regulation of Canada's pipeline infrastructure while ensuring the NEB's place as a world leader in pipeline regulation.

My main objective this morning is to share with you the high level strategies that are shaping the NEB's approach to safety and environmental regulation. You will discover over the next three days that the underlying themes throughout this workshop are closely linked to the NEB's corporate strategies. After discussing our broad strategies, I will also touch on some specific issues such as: environmental protection; emergency preparedness and response; and reporting requirements.

Improving Safety and Environmental Regulation

The Board's strategies for improving safety and environmental regulation are listed in Figure 1. Two external drivers have played a major role in shaping these strategies. First, we have listened to what our stakeholders are telling us. As part of our strategic planning exercises, we have invited a cross section of people interested in pipeline regulation to attend our meetings and share their ideas. We have also held individual meetings with interested groups across the country to hear their concerns. Second, we are learning from, and aligning our efforts with, the Smart Regulation initiative introduced in the September 2002 Speech from the Throne.

Figure 1: NEB Regulatory Strategies

1. Focus on "Smart" Regulation practices
 - a. Goal-oriented
 - b. Clear and predictable processes and decisions
 - c. Effective cooperation and partnerships with other regulators
 2. Promote public understanding and awareness
 3. Anticipate and prepare for emerging issues and applications
 4. Enable effective public participation
-

Smart Regulation

In the September 2002 Speech from the Throne, Smart Regulation was set out as a key strategy in maintaining a Canadian advantage in a globally competitive world. Smart Regulation is intended to “contribute to innovation and economic growth and to reduce the administrative burden on business”.

The government followed this announcement with money in the February 2003 budget to fund an External Advisory Committee to recommend where the government needs to redesign its regulatory approach. Gaetan Lussier, Chair of the Committee has made it clear that Smart Regulation is not about deregulation, reducing paper burden or culling regulation that has outlived its usefulness. His vision is that Smart Regulation must:

- Instill trust, confidence and credibility;
- Enable innovation; and
- Be effective in protecting the public interest (and clearly demonstrate to citizens that this is not at stake as governments find new and innovative ways to regulate).

These ideas are very consistent with the approach our Board is currently taking. The NEB believes that a Smart Regulation strategy must consist of the following components:

- Continued development of a goal-oriented regulatory framework;
- Clear and predictable regulatory processes and decisions; and
- Reduced regulatory burden through effective cooperation agreements and partnerships with other agencies.

Ultimately, “Smart Regulation” will result in improved service and reduced cycle times. Many of the preliminary steps have been taken for achieving this strategy, and more will be taken over the next year or two. We look forward to this challenge and have high expectations of all stakeholders for their continued assistance in developing a Smart Regulation regime.

Goal-Oriented Regulation

Regulation can be thought of as a spectrum ranging from regulations which are entirely prescriptive to regulations that are completely goal based; see Figure 2. The Board has adopted the term “goal-oriented” to refer to regulations that are a hybrid, that is, regulations that are somewhere between entirely prescriptive and entirely goal-based. In terms of where we are on the spectrum, I would say we’re much closer to the performance based approach, but we continue to find that some aspects of regulation are best addressed by prescription.

Figure 2: The Regulatory Spectrum

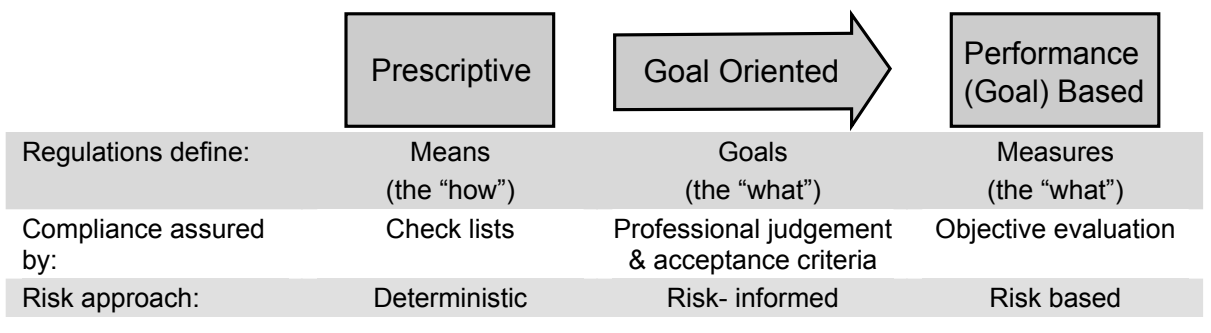
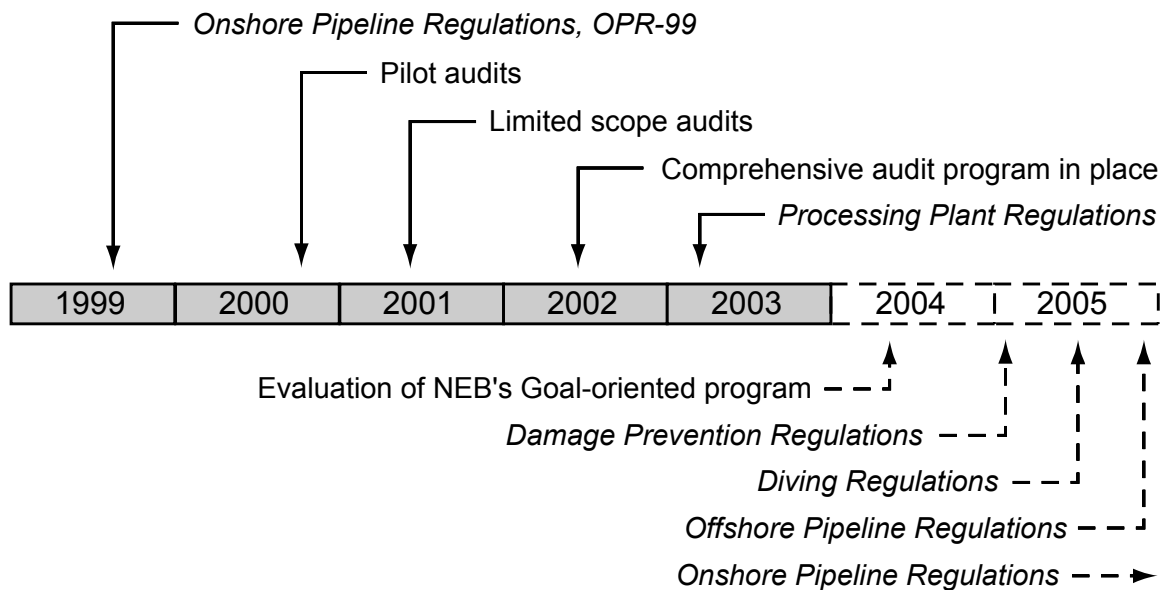


Figure 3: The NEB's Path Toward Goal-Oriented Regulation



The Board's path toward goal-oriented regulation began with the *Onshore Pipeline Regulations* in 1999, followed by the *Processing Plant Regulations* this year. As shown in Figure 3, three further sets of regulations are in various stages of preparation and will be promulgated over the next few years.

To ensure that companies have developed management practices that enable goal-oriented regulation, the Board has implemented a comprehensive audit program. Regulated companies are now audited for evidence that they have adequate and effective management systems in place to ensure that the goals of the NEB regulations are attained, and that the company has implemented and is following the practices outlined in its management system. Upon completion of an audit, a report is prepared and sent to the company outlining non-compliances with the regulation and the company then submits an action plan to the Board specifically designed to correct each instance of non-compliance. The Board process incorporates a follow-up program to ensure that the company's action plans were implemented and have successfully addressed the identified non-compliances. The Board's audit program incorporates learnings and changing priorities through a cycle of continual improvement.

To date, the 25 audits undertaken have revealed varying degrees of company compliance. In all cases, companies have been cooperative and responsive in the submission of action plans to address the audit findings.

As a leader, it is necessary that we gauge the impact and effectiveness of our actions to date while making future plans. We are preparing to undertake an evaluation aimed at ascertaining the effects and changes which have resulted from the development and implementation of goal-oriented regulations. The broad objectives of this evaluation are:

- To assess the effectiveness of the NEB's current goal-oriented approach to regulating pipeline safety and environmental protection;
- To identify gaps in the current goal-oriented approach; and
- To develop specific actions for addressing the identified gaps and improving the performance of this method of regulation.

We are currently in the process of soliciting proposals to conduct the evaluation and our target is to have the work done in the first quarter of 2004. The main benefit of this evaluation is to provide the necessary information to set the course for the future development of increasingly goal-based regulations under the Board's jurisdiction. However, we do see a secondary benefit. The evaluation should provide a valuable case study for other jurisdictions currently considering whether to move their regulatory regimes towards a performance based approach.

Clear and Predictable Processes

Canada's oil and gas pipeline infrastructure is maturing. At the same time, declining production from traditional sources such as the Western Canada Sedimentary Basin requires us to find new sources of gas and oil. New pipelines will be needed to carry natural gas from northern and offshore reserves to expanding North American markets. In addition, increased production of liquid hydrocarbons from Alberta's oil sands will necessitate expansion of our oil pipeline transportation systems. Industry faces many challenges in making the required investments. What industry expects from the regulator is that it provide effective and efficient regulatory processes to ensure that investment can proceed in a timely fashion.

We have several initiatives underway to improve the clarity of our regulatory processes including:

- Filing Manual (Revised Guidelines for Filing Requirements);
- Pre-Application Meeting Guidance;
- Service standards;
- Aboriginal consultation; and
- Clear decisions

We are nearing the end of an initiative that began in September 2002 which will help tie the concept of goal-based regulation to the application stage of the industry - the revising of our Guidelines for Filing Requirements. The objective of this project, besides updating an outdated document, is to produce a Filing Manual that will offer better clarity and understanding of the Board's expectations with respect to application requirements. By understanding what the Board is trying to achieve in requiring certain information, applicants will be motivated to submit increasingly complete applications which will in turn reduce information requests, and therefore the time required for the Board to render decisions.

The major review of the draft Filing Manual has taken place over the past ten months and has included consultation with a wide variety of stakeholders. I am pleased to announce that we will be releasing the last draft of this document later this morning for a final comment period prior to publishing the document in the spring of 2004.

Guidance Notes for pre-application meetings have also been developed to facilitate communication between Board staff and outside parties. This should provide a helpful tool to proponents of projects who wish to meet with the Board prior to submitting an application. The Board encourages face-to-face pre-filing meetings with staff when applicants have questions about the intent of any portion of the filing requirements in the context of their specific application.

We have for some time now been measuring our cycle times for processing applications as a prerequisite step to establishing service standards. We are committed to working towards service standards that will apply to many applications. We won't ever be able to guarantee a cycle time for each and every specific application because the challenges in dealing with specific applications are dependent, among other things, upon the extent of third party impacts. However, we will commit to a

service standard that will apply to the majority of applications, thus creating increased certainty for applicants.

The uncertainty surrounding the proper roles of industry, governments and regulators with respect to aboriginal consultation is certainly not conducive to making the major investments in new supply that are required. I am very pleased to note that NRCan and DIAND have recently initiated a consultation process on a two-year pilot process which would apply to NEB regulated projects south of 60.

And finally, we put a great deal of effort into ensuring our reports clearly set out the Board's reasoning in respect of decisions.

Effective Cooperation

It is a reality that energy projects often involve several jurisdictions, in the case of a northern pipeline, over a dozen jurisdictions are involved. Where jurisdictions overlap, such as in the case of a potential northern pipeline proposal, the NEB is working with a number of regulatory agencies to ensure that environmental assessment and regulatory issues are dealt with in a coordinated manner. Coordination efforts have been focused on eliminating duplication while maintaining or enhancing meaningful public engagement.

One of the Board's key corporate strategies is to partner with other regulatory agencies wherever possible in order to improve regulatory processes and provide industry with one-window reviews.

We worked hard with other regulatory agencies in the North to hammer out a unified regulatory process for a pipeline in the Mackenzie Valley. We also partnered with the CNSOPB to provide a single window review process for EnCana's offshore Deep Panuke project.

On an international level, we have been meeting regularly with the FERC and the Mexican national energy regulator (the Comision Reguladora d'Energia). In September we signed a trilateral cooperation agreement in which each regulator committing to regular meetings at which we share perspectives on our regulatory approaches and work to ensure that we can eliminate inconsistencies in our regulatory approaches, to the extent that is possible within our respective legislative mandates.

We are also working closely with the Canadian Environmental Assessment Agency with a view to improving the environmental assessment process. The recent passage of Bill C-9 provides us with some opportunities to work together more closely and identify process improvements.

Promoting Public Understanding and Awareness

The reliability and integrity of existing pipelines is maintained through integrity management programs. The effectiveness of these programs has contributed to the fact that there has been a decline in the number of incidents and no ruptures to date on NEB regulated pipelines in 2003.

The National Energy Board recognizes that the safety performance of the companies it regulates is important to everyone. We believe it is important to provide objective information to the public on the implications of having pipelines in their communities and on the safety record of the pipeline industry.

In April, 2003 we published the first of what will become an annual performance report on the safety of the companies we regulate. *Focus on Safety - A Comparative Analysis of Pipeline Safety*

Performance is aimed at providing a clear understanding of the safety performance of the NEB-regulated oil and gas pipeline industry.

The Board notes that the safety performance of NEB-regulated pipeline companies has improved in some areas since the first publication of the *Focus on Safety* report. The contractor injury frequency in 2001 was of concern when the first edition was published. In 2001, the contractor injury frequency was 5.35 lost time injuries per 200,000 man hours. This figure was well above the injury frequency reported among reference organizations. In 2002, we are happy to report that the contractor injury frequency dropped to 1.92 and is now in line with the frequencies reported by other bodies.

Copies of the first edition of “Focus on Safety” are available at this workshop. The new report incorporating the 2002 performance data is scheduled for publication in January, though I believe the data will be available at this workshop.

Emerging Issues and Applications

Anticipating and preparing for emerging issues and upcoming applications is also a key part of improving service to our stakeholders. Staff and Board Members regularly review the outlook to identify applications on the horizon and emerging issues.

An example is the expected receipt by mid-2004 of an application for the construction of the Mackenzie Valley pipeline. In anticipation of this application, the Board has been monitoring advances in pipeline materials and other new technologies which will almost certainly be used in the building of a northern pipeline. We have also been busy building internal strengths within our organization to ensure that all applications receive an appropriate degree of review and scrutiny.

Effective Public Participation

The effective and ongoing engagement of the public on safety and environmental matters continues to be one of the Board's main priorities. We live in a rapidly changing society where people have come to expect that useful information will be instantly available at the click of a mouse. Recent publications like the *Focus on Safety* report, incident data, and landowner guides, all available on our website, are examples of achievements in this effort.

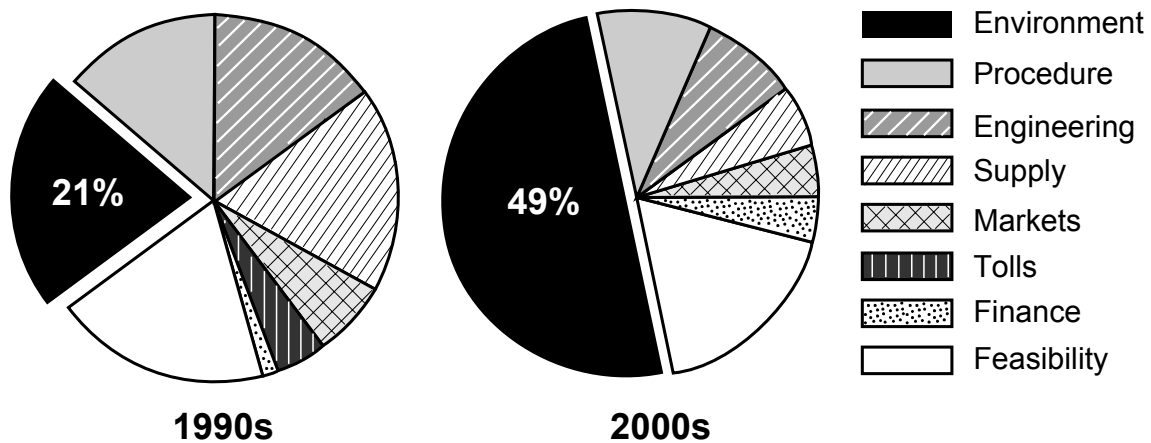
We also provide the public across Canada with toll free access to the Board, with service available in either official language.

Other examples are Awareness Workshops, which I'll discuss in a minute, and most recently we have been educating parties on the availability of appropriate dispute resolution (ADR) tools.

Environmental Protection

The strategies I described earlier apply to all aspects of physical regulation. There are certain aspects of environmental regulation however, that I'd like to discuss further. Environmental protection has required an increasing amount of the Board's resources. To provide you with a context for just how much, I've compared in Figure 4 the time used in two major hearings, one in the 1990s and one in the current decade. As illustrated, the time devoted to environmental issues has increased from just over 20 percent to nearly 50 percent. Clearly, our efforts to regulate smarter require special attention to improving environmental assessment processes, information gathering, and focusing on things that really matter.

Figure 4: Hearing Time Allocated to Issues



We use a lifecycle approach to environmental issues. This includes environmental assessments of applied-for projects, inspection and monitoring of construction activities, and audits of regulated companies' environmental protection programs. In order to continue progress in meeting these commitments, the Board:

- Has ensured that the requirements for environmental assessment information in applications are a key component of the GFR review process;
- Continues to develop new tools and processes to manage effectively the wealth of environmental assessment and compliance information before it; and
- Must anticipate and prepare for emerging issues and upcoming applications.

Most of our environmental assessments at the NEB confirm or incrementally improve environmental design aspects of small energy infrastructure projects that are otherwise clearly in the public interest. Simple energy projects may often require only cursory environmental assessment, and this is the objective of various provisions in the CEA Act Exclusion List Regulations and the NEB's Streamlining Order. In effect, these regulatory "filters" formally implement a risk-management approach, focusing EA attention and resources on larger or more complex projects.

In dealing with projects not excluded or streamlined, regulators must continue the focus on design issues with significant potential for undesirable environmental effects. A structured "risk management" approach, supported wherever possible by factual evidence helps a lot. At the NEB we are carefully testing such an approach. During our assessment of energy infrastructure projects we ask the following questions about environmental issues that might appear to require regulatory action or intervention:

1. Is the issue, effect or information gap relevant to the project and addressable through improved project design?
2. What is the probability of an undesirable outcome if the issue is not addressed?
3. What are the environmental consequences if the issue is not addressed?

In most cases we should not invest time or effort on irrelevant, intractable, improbable, or unimportant environmental effects. Good EA risk management of course benefits from complete, focused, and factual project descriptions, ideally originating from a similar issue-based perspective!

Emergency Preparedness and Response

On Thursday, I note that there is a full day session on emergency preparedness and response matters. The events of September 11, 2001 have brought new urgency to consideration of pipeline security matters and this will form part of those discussions.

As you may know, the Board recently published a draft document entitled *Draft Guidance Notes for the National Energy Board Damage Prevention Regulations*. This discussion draft will eventually form new regulations governing damage prevention initiatives and activities ranging from how locates are performed to determining the effectiveness of awareness programs.

The National Energy Board will host its 5th Pipeline Public Awareness Workshop (Awareness 2004) devoted to sharing best practices in damage prevention and public awareness in Montreal, Quebec at the Queen Elizabeth Hotel from September 26 to 28, 2004. We intend to continue holding awareness workshops at rotating locations across Canada and separate from this workshop. We plan to continue to expand these events to include first responders and other local stakeholders. As in past workshops, the focus will be on pipeline damage prevention programs, and will include a full-day on "Continuing Education and Liaison Programs" which will concentrate on informing the public and emergency responders of their roles in the event of a pipeline-related emergency.

Reporting

Many of the sessions being held over the next 3 days will provide a forum for discussion on the development and maintenance of clear and useful reporting by industry and by the Board. I encourage this discussion. If the NEB is to be a leader in safety and environmental regulation, we need to continually evaluate the value of the data we collect through mandatory and voluntary reporting initiatives and find ways to ensure that we are meeting the needs of Canadians. Eventually, the NEB (with the cooperation of Human Resources Development Canada and the Transportation Safety Board) plans to be able to provide one window simplified reporting. But, before we get there, we need your assistance in determining what needs to be reported.

Conclusion

Before leaving this workshop, you will be asked to provide feedback on this event as a means of sharing information and consulting with stakeholders. Please be honest and provide comments and suggestions which can be used to make future events even more productive. Everyone here is faced with increasing demands on their time and what we've heard to date is that you prefer a single event such as this, rather than consulting each time we have an initiative underway. In anticipation of the success of this event, planning has begun for the next workshop to be held in the spring of 2005.

We share a common goal, the continued safe, reliable and environmentally sound operation of Canada's pipeline infrastructure. Through continued and frequent consultation among industry, regulatory authorities and other stakeholders, we will develop a better understanding of each other's interests and responsibilities.

Thank you all for choosing to attend this event - I encourage each of you to participate fully in each session you attend. Have a good workshop.