Minutes

Flaring and Venting Project Team ~ Workshop with Golder

Date: Wednesday, October 7, 2009
Time: 10:00 am to 3:30 pm
Place: CASA Office, 10035 108 Street, Edmonton

In attendance:

Name	Stakeholder group
Krista Phillips	CAPP
Jim Spangelo	Alberta Energy Resources Conservation Board
James Vaughan	Alberta Energy Resources Conservation Board
Anna Maslowski	Alberta Energy
Randy Dobko	Alberta Environment
Wayne Hillier	Husky Energy
Chris Severson-Baker	Pembina Institute
Andrew Higgins	CAPP/CNRL
Jolene Shannon	Pembina Agricultural Protection Association
Robyn Jacobsen	CASA Secretariat

Guests:

Name	Stakeholder group
Larry Charach	Golder Associates Ltd.
Andrew McGoey-Smith	Golder Associates Ltd.

With regrets:

Name	Stakeholder group
John Squarek	Small Explorers and Producers Association of Canada
Bob Barss	Alberta Association of Municipal Districts and Counties
Doreen Rempel	MGV Energy Inc./CSUG
Ian Peace	RAPID

- Andrew chaired the meeting, which convened at 10:00 a.m. Quorum was achieved.
- Golder reviewed their draft report with the team, including a PowerPoint presentation.

Backgrounders

- Any factual errors in the report or the backgrounders should be forwarded to Golder.
- Golder noted that Matthew Johnson reviewed the information in the backgrounders.

Key Points from Interviews

- A team member noted that it was disappointing that SEPAC, on behalf of the small producers, didn't respond to the interview request.
- There was a comment about the statement that one of the operators is able to conserve at units smaller than 600 m^3/day. It was clarified that there are some small units where conservation is viable, but that commercial technology is not really available at this time.
- Potential Exemption Criteria – Greenhouse gas (GHG) emissions were identified in the evaluation criteria, the team noted that companies don't currently report their GHG emissions.

Issues Identified

- Increased Cooperation
    - The report includes a suggestion for developing a recommendation for the Climate Change and Emissions Management Fund to support infrastructure for aggregators (such as the Vermillion River project).
    - One team member felt that the Otherwise Flared Solution Gas (OFSG) Roylaty Waiver Program already supports this.
- Measurement Issues
    - Golder noted that perhaps a recommendation could be a requirement to report the composition of solution gas flared or vented. The team felt that there isn't enough variation in composition to warrant this and that volume is more important than composition. It was noted that composition could be useful for determining GHG credits.
- Residential Use of Solution Gas
    - Some team members felt that the residential use of solution gas is not really feasible due to the cost of the pipeline.
- Time Limits for Getting Conservation in Place
    - Golder brought up the issue of length of time for well testing and tie-in. The team discussed two issues related to testing and tie-in:
        - Adjusting the time limits – there were comments about how much impact this would actually have.
        - Land owner issues/cooperation.
        - Operator due diligence – is the operator doing their best to complete testing and tie-in as soon as possible?
- Royalty Exemption Restraints
    - Golder noted that the Royalty Program is limited to the producer's property. This may inhibit willingness to cluster wells or cooperate with other operators.
- Other Issues – Golder gave the team an opportunity to highlight any additional issues.
    - Some team members felt that more information on technology options would be useful.
    - In the report, it was noted that Emerson could provide more information on costs. The team would be interested in seeing this.

Economic Impact

- The team noted that there is no economic impact analysis in the current version of the Golder report. Golder explained that a detailed economic analysis would involve developing a model, which is not possible within the team's budget. Golder agreed that they could make an estimation of the economic impact, including a qualitative discussion.
- The team suggested that there could be a quantitative measure of the importance of each of the 'issues' identified in the report.

- It was noted that there would have to be agreement from both CAPP and SEPAC representatives that the economic test met their needs.
- The team generally felt that the economic analysis was essential for the team's decision-making.

- The team questioned Golder on the estimations of stranded oil (one of the objectives of the study). Golder explained that they don't have enough information to do this calculation. They could try and obtain a qualitative estimate by doing some follow-up work with the operators they interviewed in the stakeholder consultation.
- The team noted that the estimation of stranded oil is a very important piece of information for their decision-making – they need to know what impact their decisions will have on industry.

Available Flaring and Venting Reduction Technologies
- A member of the team felt that high efficiency combustion would probably be an incinerator and would not be considered conservation.

Current Drivers for Flaring and Venting Reduction
- Air Quality
    - The team noted that H2S is not usually vented. There could be some mention of H2S, but there can be less of an emphasis in section 3.6.1.1. It was noted that sour solution gas is combustion emits SO2. The concern is that if the flare is improperly designed, not all the H2S may be combusted. This issue is already being managed.
- Greenhouse Gas Emissions
    - In relation to the global warming potential of CH4 vs. CO2, the team suggested that volume is more important and recommended the following numbers for the calculations:
        14.2 tonnes of CO2 equivalent per e3/m3 of gas vented
        2 tonnes of CO2 equivalent per e3/m3 of gas burned

Decision Making Tool
- Some team members noted that they would be interested in seeing more environmental factors, taking into account cumulative effects.
- Some members discussed venting from pipelines – it is such a small amount that it is probably too small to worry about. However, Golder agreed to make a note of this in the report.
- Golder reviewed the SMART decision analysis framework, which is the basis for the decision-making tool Golder has developed for the team. A few members were familiar with this framework. However, Golder explained that the attributes and weights in the tool should be determined by expert opinion in a workshop. They also explained that the tool would be Alberta- or region-specific.
- The team realized that, without organizing a workshop, the tool currently does not help to determine the exemptions they were looking for. Golder explained that the model they have developed helps to highlight the relative importance of each factor, but not how to consider each of the factors.

Parking Lot
- Threshold Analysis - 900 m^3/day and % conservation
- Economic Impact - industry/ERCB to provide cost data?
  - risk of stranded resources
- Input from small producers (SEPAC)
- Incentives for increased cooperation/less proliferation
    - Otherwise Flared Solution Gas Royalty Waiver Program
    - Climate Change and Emissions Management Fund
- Well Test/Tie In time limits - landowner issues
  - company due diligence

The workshop adjourned at 3:00 pm.