

GAS LEAKS ALLIES REVIEW OF PHASE 1 REPORT

Assessment of Pipeline Safety Phase 1 Summary Report
Prepared by Dynamic Risk Assessment Systems, Inc.
For the Commonwealth of Massachusetts

In light of the recent IPCC Report and Massachusetts' own Global Warming Solutions Act, any review of the present gas distribution system must acknowledge that the system itself is on the way out and in the near future will become obsolete. Huge advances in geothermal heating and cooling, solar and wind power as well as battery storage mean that fossil fuels will soon cost more than renewable energy.

Dynamic Risk's report never touches on this simple economic scenario, recommending instead an acceleration of pipeline replacement.

Further, the report includes eleven recommendations that in several cases underline the weaknesses of the system but are not technical, measurable, or prescriptive enough to improve gas safety.

REVIEW OF DYNAMIC RISK'S RECOMMENDATIONS

Numbers in the text below refer to the numbering system in the report. The recommendations are grouped here for the purpose of analysis.

Many recommendations raise more questions than answers. For example:

- 1. Take steps to improve gas company emergency response plans.*
- 2. Conduct a tabletop and field emergency response preparedness drills.*
- 3. Establish programs and training for process safety hazard identification in the field, specifically for live gas works.*

Plans for emergencies have clearly been inadequate, or there would be no need for these recommendations. They reveal no drills have taken place and that any programs for dealing with live gas works in the field are inadequate. Considering the explosive nature of live gas, these first three recommendations raise troubling questions about gas company preparedness and sound a serious warning.

Three recommendations make only cautious, generalized suggestions:

- 4. Review the Professional Engineer requirement and in the short term, enhance or supplement current guidance to obtain added value and to reduce disruption in the upcoming construction seasons.*
- 5. Consider whether resources expended in GSEP regulatory process provide good value for effort and cost and if the process can be made more effective.*
- 7. Consider providing additional financial resources to enhance recruitment and retention of individuals with pipeline safety experience and expertise in government agencies, divisions, and/or departments.*

In addition to the lack of specifics in all the recommendations, these particular recommendations are open to interpretation. What does the “added value” in 4 refer to, and how will it be measured? Is there a cost-effectiveness test for 5, and how would it work? How many safety experts do government agencies have now and how many do they need? Do utilities need more personnel with pipeline safety experience? How many per mile of pipe?

Two recommendations are so platitudinous that they can hardly impact the urgency of improving public safety:

- 8. Ensure that pipeline safety is a significant consideration across all relevant government agencies, divisions, and/or departments, including in ratemaking process.*
- 9. Further consider organizational goal conflicts and how best to resolve them. Identify accountability and responsibility within government agencies, divisions, and/or departments.*

These recommendations suggest that safety is not currently a priority focus and that government agencies, divisions, and departments are working at cross purposes, but the lack of specificity elides both responsibility and corrective action.

A sharp focus is placed on the meter replacement program:

- 10. Consider extending the meter replacement program beyond seven years.*

This recommendation would result in gas meters at homes and businesses being inspected less frequently, increasing public safety risks from uninspected pipes and appliances.

Meter replacement is the only time when a gas company assesses the condition of indoor pipes and appliances, checking for corrosion, leaks, pipe supports, and manually bleeding appliances of air. Inspections can find dangerous conditions, make them safe, and document them. A meter inspection takes about a half an hour and costs the gas company pennies when spread over seven years.

Dynamic Risk has devoted a disproportionate amount of time to this topic both in the report and in community listening sessions where they suggested replacing meters every 12 years. Despite serious cautions from gas workers and others, the report recommends that gas companies be less responsible rather than more.

Two remaining recommendations do not address the impact of renewable energy sources that are replacing gas:

- 6. Develop a collaborative approach to consider further accelerating pipeline replacement.*
- 11. Specifically consider gas pipelines and gas pipeline safety in the transition plan to achieve 80% reduction of greenhouse gases by 2050:*
 - a. Any transition plan should consider pipeline risk and societal impacts (public safety and pipeline safety);*
 - b. Varying priorities may adversely affect gas pipeline safety and gas supply reliability; and,*
 - c. Ensure that all policies and regulations fully consider gas pipeline safety and changes in risk.*

While number 11 mentions the plan to reduce emissions in compliance with the Global Warming Solutions Act mandates, there is no mention of the huge safety benefit of transitioning to a nonexplosive

energy source to heat our buildings and cook our food. Both recommendations only emphasize concern for a reliable gas supply and safety of the pipeline, ignoring the problem of continuing to invest in new gas infrastructure when most will not be needed in 30 years.

In particular, the statement that “varying priorities may adversely affect gas pipeline safety” needlessly puts environmental concerns and public safety in opposition when the two are inherently intertwined. This vague forecast signals potential conflict when there is an urgent need for specific safety measures now.

With Phase 1 of the Report completed, Dynamic Risk will turn to Phase 2:

From Section 9 of the Phase 1 Report:

While the DPU, EEA and Dynamic Risk are in discussion about the specifics of Phase 2, the Panel anticipates Phase 2 will include:

- *Continuing the work of Phase 1, including reviewing and analyzing documents received from the Gas Companies and from DPU;*
- *Conducting field visits at gas company locations; and,*
- *Performing additional analysis to develop additional observations, final findings and recommendations, and develop the final report.*

This projection does not recognize that substantial change from the accelerating transition to renewable energy is coming to the gas industry that will affect its customers, management, employees, and investors.

The deliverables for the project are as follows:

Monthly progress report (10th day of each month).

Phase 1 Presentation and Preliminary Report by February 28, 2019

NOTE: This delivery date was missed by 10 weeks.

Phase 2 Presentation and Final Report by June 30, 2019

NOTE: This date will be missed substantially.

The estimated costs to complete Phase 1 and Phase 2 are as follows:

Phase 1: \$822,796.

Includes travel costs of \$38,000.

Phase 2: \$907,648.

Includes travel costs of \$38,000 and a management fee of 12% that covers subcontractor engagement costs and project administrative management.

Total: \$1,730,444.

Stakeholder Engagement: \$259,840.

The total estimated cost for Phase 1, Phase 2, and Stakeholder Engagement is **\$1,990,284.**

Conclusion

Overall, the report is an outline of what Dynamic Risk will cover rather than an analysis of safety issues, risk management, or gas incidents. The panel seems as if they are trying to explain to themselves what they will write about, not from the perspective of gas safety experts. As a result, Phase 1 is limited to describing the scope of the assessment instead of including specifics on how to improve safety.

Of particular concern, Phase 1:

- Overemphasizes risks during work on gas pipes, overlooking risks from leaking gas and the leak-prone pipe itself.
- Attributes risks to worker mistakes rather than recommending procedures to account for inevitable human errors.
- Focuses on how to mobilize after gas incidents rather than on prevention, but never addresses concrete details such as the number of workers or emergency responders needed to respond to an incident.

Finally, the report sets up a false opposition between climate risks and safety issues, claiming a need to reconcile what climate advocates want and what gas companies want. It suggests that “varying priorities” could be at odds with safety or may adversely affect safety and implies that the faster we replace gas pipes, the safer we’ll be.

These recommendations ignore the many ways we can minimize the risks of explosive gas while transitioning to cleaner, renewable sources of energy. More importantly, they shift the focus of the report from public safety to the safety of the gas industry.