

#### **Attachment 4**

##### Technical Working Group Safety Metrics Guiding Principles (2017) (provided for reference only)

1. Both leading and lagging metrics provide value, and the metrics list should include both.
2. Collecting metrics that are consistent across the utilities will be useful for benchmarking purposes; however, strictly limiting the metrics list to metrics that are collected by all the utilities may not be feasible given that risks vary across different utilities.
3. The subset of metrics that are consistent across the utilities should be made comparable by using consistent descriptions and definitions of the metrics. Differences should be eliminated to the extent feasible to allow uniformity. This subset of metrics should be normalized by uniform divisors (e.g. per customer served, per unit of assets, per square mile of service territory, etc.) to facilitate comparison across utilities of different sizes.
4. The metrics list should not be limited to the top risks, since those risks will change over time. In addition, some metrics for lower risks may actually provide good data for higher risks (e.g. gas ruptures vs. gas leaks).
5. Collecting multiple metrics for each risk may be valuable when appropriate, depending on the risk. Collecting multiple metrics could also help validate each metric, if certain metrics potentially create perverse incentives, such as OSHA recordables.
6. To avoid bias we should focus on objective data to the extent possible. Definitions should be clear and used consistently among parties and used consistently over time.
7. Descriptions of metrics should be complete and understandable by all parties. Technical jargon and acronyms should be explained or defined, and metric definitions established by a standards body or regulatory entity should be referenced. Metrics should be expressed in appropriate units (e.g. leaks per mile per quarter, serious injuries incurred by member of the public per quarter).

8. The metrics included on the list should provide actionable information that can be used to inform and focus programs and expenditures.
9. *\*Contested: Metrics that are tied to incentives, including financial incentives, should be adopted only with appropriate bias controls. Utilities reporting metric results should include whether an incentive at the utility is measured by the same metric.*
10. Metrics should be capable of being used to assess trends over time; therefore, the metrics need to be verifiably collected and measured consistently over time.
11. The metrics may need to be revised over time as needed, using the appropriate process established by the Commission.