



State of Oregon  
Department of  
Environmental  
Quality

## Oregon Greenhouse Gas Reporting Advisory Committee

Straw proposal: Reporting requirements for power importers and fuel distributors  
For discussion January 21, 2010

Gasoline, diesel and heating oil		
Reporting parties	Reporting requirements	Comments, questions and concerns
<p><b>Who:</b></p> <p style="padding-left: 20px;">Bulk plants      About 80</p> <p style="padding-left: 20px;">Terminals      7</p>	<p>Some information is already reported to DEQ. Bulk plants and terminals are required to have permits and currently report annual throughput by fuel type.</p> <p>We could require these facilities to report fuel throughput and aggregated purchases or sales (see below), along with emissions factors approved by DEQ and estimated greenhouse gas emissions.</p> <ul style="list-style-type: none"> <li>• Require <b>terminals</b> to report               <ul style="list-style-type: none"> <li>• Total fuel quantities sold for use in Oregon</li> <li>• Total fuel quantities sold to bulk plants</li> </ul> </li> <li>• Require <b>bulk plants</b> to report               <ul style="list-style-type: none"> <li>• Total fuel quantities sold for use in Oregon</li> <li>• Total fuel quantities purchased from terminals</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Should we exclude bunker fuels or require as informational only?</li> <li>• How would we capture biofuels?</li> <li>• A small amount of fuel bypasses terminals and bulk plants may be delivered directly to gas stations. These fuel distributors may also need to report to DEQ.</li> <li>• DEQ would like to align greenhouse gas reporting with potential future reporting for the Low Carbon Fuel Standard.</li> <li>• What will reporting forms look like?</li> <li>• For what year should reporting begin?</li> <li>• DEQ considered using existing gas tax reports to ODOT, but feels that the gas tax system doesn't collect sufficient information to evaluate Oregon's fuel consumption. The reports have data gaps (e.g. fuel used for military vehicles, farm applications, diesel fuels and heating oil). DEQ considered having businesses who report to ODOT submit a duplicate report to DEQ; however, this would require reporting from a large number of businesses (about 2,400 fuel stations).</li> </ul>

Natural Gas		
Reporting parties	Reporting requirements	Comments, questions and concerns
<p><b>Who:</b></p> <p>Natural gas distributors</p> <p>This includes NW Natural, Cascade Natural Gas, Avista and possibly others</p>	<p><b>Number of entities:</b></p> <p>3</p> <p>Report estimated greenhouse gas emissions information according to EPA protocols, delineated to show fuels used in Oregon.</p>	<ul style="list-style-type: none"> <li>• Stationary sources report natural gas combustion to DEQ annually. Most stationary sources receive their natural gas from distributors. Their emissions would need to be subtracted out of the reports from natural gas distributors to avoid double counting. About 6 companies have a direct-connection to natural gas pipelines. These companies bypass natural gas distributors and likely already report natural gas combustion to DEQ annually as stationary sources.</li> <li>• EPA's emissions factor for natural gas is based on carbon intensity at combustion, but applies to both combusted gas and fugitive emissions. However, fugitive emissions have a higher carbon intensity. EPA is working on Section W for fugitive emissions. EPA's rule may not require reporting of lost, unaccounted for natural gas, which varies from 0% to 4% of throughput.</li> <li>• There is little variation in carbon and fuel (e.g. ethane) content in the natural gas distributed in Oregon. Btu can vary by about 4%. Some companies have measurement stations for sulfur and CO content through continuous monitoring and grab samples.</li> <li>• What will reporting forms look like?</li> <li>• For what year should reporting begin?</li> <li>• The reporting requirements wouldn't apply to: <ul style="list-style-type: none"> <li>➢ Direct-connect farms</li> <li>➢ Pump stations (Note: Wheeled gas is at high pressure. There are little to no fugitive emissions at high line pressure. Gas line losses may only be about 0.5% and due to meter inaccuracies.)</li> <li>➢ Publicly owned distribution companies. These companies could potentially receive a reporting exemption from EPA because reporting is administratively prohibitive.</li> </ul> </li> </ul>

Liquid petroleum gas (Odorized Propane, Butane, Ethane)*		
Reporting parties	Reporting requirements	Comments/concerns
<p><b>Who:</b></p> <p>Wholesalers</p> <p>Such as Suburban Propane, Ameri Gas and Ferrellgas</p>	<p><b>Number of entities:</b></p> <p>&lt;10 selling to Oregon dealers</p> <p>Quantities of liquid petroleum gases distributed in Oregon, emissions factors approved by DEQ, estimated greenhouse gas emissions</p>	<ul style="list-style-type: none"> <li>• To protect dealer confidentiality, we wouldn't require wholesalers to specify fuel destination such as region or county.</li> <li>• To avoid data gaps, we'd need to require reporting from some large, out-of-state companies that deliver propane to Oregon businesses</li> <li>• What will reporting forms look like?</li> <li>• For what year should reporting begin?</li> <li>• DEQ considered using existing reports published by the American Petroleum Institute on total LPG sales by state. Petroleum companies voluntarily report annual sales of LPG in surveys to API. DEQ feels that the API report wouldn't provide sufficient, timely information to evaluate Oregon's fuel consumption for the following reasons: <ul style="list-style-type: none"> <li>➤ Reporting to API is voluntary</li> <li>➤ API estimates total sales, using survey responses and an approximation for non-responders</li> <li>➤ There's no one to certify the accuracy of the data</li> <li>➤ API can't assume the accuracy of data and there are no consequences for inaccurate or incomplete information</li> <li>➤ DEQ can't verify the accuracy of the data</li> <li>➤ The report has a one-year data lag</li> </ul> </li> </ul> <p>API provides associations (e.g. NWPGA) a list of the companies who didn't submit the survey to API. NWPGA asks these companies to report. There's an economic incentive to report because a percent of assessment collections are eligible for rebate back to the state. Each state's allocation of rebate funds is based on the latest per-state data compiled using survey responses.</p> <p>*Corrections made to this section 1-22-10 by Andrea Curtis</p>

Power		
Reporting parties	Reporting requirements	Comments/concerns
<p><b>Who:</b> Investor owned utilities</p> <p><b>Number of entities:</b> 3</p> <p>This includes PGE, PacifiCorp and Idaho Power Company</p>	<ul style="list-style-type: none"> <li>• Power generation: quantities of power, fuel types, emissions factors approved by DEQ, estimated greenhouse gas emissions</li> <li>• Purchased power: quantities of power in megawatt hours, sellers (if known), originating fuel types (if known), emissions factors approved by DEQ, estimated greenhouse gas emissions</li> <li>• Transmission line losses: Reporting requirements could include either option below for SF6 emissions, along with emissions factors approved by DEQ and estimated greenhouse gas emissions. <ul style="list-style-type: none"> <li>a. Calculation of SF6 emissions by looking at the percent of equipment owned in Oregon, tracking equipment capacities to hold SF6, and factoring in loss ratios; or</li> <li>b. Estimation of SF6 emissions through cost allocation.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• DEQ will need to establish emission factors for unspecified power (e.g. from supplier, source tests, EPA's AP-42)</li> <li>• Multi-jurisdictional companies could rely upon cost allocation methodology approved by PUC for reporting emissions allocated to Oregon</li> <li>• Should Oregon establish a de minimus amount for SF6 reporting? The national average leakage rate is close to 10%.</li> <li>• SF6 reporting may be the most burdensome part of reporting for businesses. Even if we wait for EPA protocols, we'll need to determine how to allocate emissions to Oregon.</li> <li>• What will reporting forms look like?</li> <li>• For what year should reporting begin?</li> </ul>
<p><b>Who:</b> Electricity service suppliers</p> <p><b>Number of entities:</b> 5</p> <p>This includes:</p> <ul style="list-style-type: none"> <li>• Constellation NewEnergy</li> <li>• Shell Energy North America (US) L.P., formerly Coral Power</li> <li>• CP Energy Marketing (US) Inc.</li> <li>• Sempra Energy Solutions</li> <li>• The Royal Bank of Scotland plc</li> </ul>	<ul style="list-style-type: none"> <li>• Power generation: quantities of power, fuel types, emissions factors approved by DEQ, estimated greenhouse gas emissions</li> <li>• Purchased power: quantities of power in megawatt hours, sellers (if known), originating fuel types (if known), emissions factors approved by DEQ, estimated greenhouse gas emissions</li> </ul>	<ul style="list-style-type: none"> <li>• We wouldn't require ESSs to report transmission line losses unless they own the lines</li> <li>• What will reporting forms look like?</li> <li>• For what year should reporting begin?</li> </ul>

Power (contd.)		
Reporting parties	Reporting requirements	Comments/concerns
<p>Consumer owned utilities:</p> <p>Electric Coops 19</p> <p>People's Utility Districts 6</p> <p>Municipal Electric Utilities 13</p>	<p>Require <b>load-following</b> customers to report:</p> <ul style="list-style-type: none"> <li>Quantities of power (in megawatt hours) segregated by contract types</li> <li>The percentage of each fuel or energy type used to produce electricity purchased under each contract type</li> </ul> <p>Require <b>slice</b> customers to report:</p> <ul style="list-style-type: none"> <li>Power generation: quantities of power, fuel types, emissions factors approved by DEQ, estimated greenhouse gas emissions</li> <li>Power purchased from BPA: Quantities of power (megawatt hours) of power segregated by contract types</li> <li>Other power purchases: Quantities of power in megawatt hours, sellers (if known), originating fuel types (if known), emissions factors approved by DEQ, estimated greenhouse gas emissions</li> </ul> <p>Third party reporting: BPA or a trade association may report on behalf of consumer owned utilities if it can supply sufficient information.</p>	<ul style="list-style-type: none"> <li>This could create a reporting burden on COUs, which already complete about 40 forms.</li> <li>BPA power is treated as system power; it has one emission factor. About 9% of BPA's system sales is from unspecified sources. BPA would provide the system mix.</li> <li>Load-following customers obtain 100% of power from BPA.</li> <li>Slice customers wouldn't report the fuel or energy type used to produce the electricity purchased under contracts with BPA because BPA provides hydro or nuclear power to slice customers</li> <li>Certification of accuracy may be a concern of third party reporters</li> <li>What will reporting forms look like?</li> <li>For what year should reporting begin?</li> </ul>
<p><b>No reporting requirements for:</b></p> <ul style="list-style-type: none"> <li>BPA-owned transmission line losses. BPA could report this information voluntarily. Losses of SF6 are equivalent to about 25,000 to 30,000 tons of CO2; this is a leakage rate of about 0.5%.</li> <li>Privately owned transmission line losses (where transmission lines aren't owned by IOUs)</li> <li>Marketers and brokers. Their sales would be included as part of the retail sales of system power reported by other parties.</li> </ul>		