## **DRAFT** Utilities Emergency Response Overview

|   | Short-term<br>(Hours to days)                              | Mid-term<br>(Weeks to months)                                | Long-term<br>(Years)                               |
|---|--|--|--|
|   | Increase hydro generation                                  | Divert gas from LNG plant (warm shutdown)                    | Southcentral Power Project                         |
|   | Increase limits on Kenai 115 kV line                       | Golden Valley Electric                                       | Replacement generation ML&P Plant 1 & 2            |
|   | Golden Valley Electric Assoc.                              | -Curtail energy sales  | More renewables                                    |
|   | - Curtail energy sales                                     | -Purchases up to 70 MW                                       | -Wind, geothermal, hydro                           |
|   | - Purchase up to 70 MW                                     | Seward on own generation                                     | Gas storage  |
| System Ops<br>(In no particular order,<br>depends on situation) | Divert gas from LNG plant (warm shutdown)                  | Sharing agreements   | - LNG, in-ground                                   |
|   | Reduce/eliminate spinning reserve (Chugach arms SILOS)     | Emergency rates (would require tariff)                       | IGT – liquid fuel conversion                       |
|   | ML&P/Chugach generation swap (Joint decision)              | Portable generators (i.e. lease from GE and use oil bladder) | Purchase power from GVEA                           |
|   | ML&P converts to liquid fuel (ML&P decision)               | ML&P to continue liquid fuel (ML&P decision)                 | Cook Inlet Resource Management Plan                |
|   | Emergency gas purchases (Beyond contractual requirements)  | Evaluate spinning reserve                                    | Intergrate Seward generation                       |
|   | Adjust generation mix based on deliverability              |  | Additional BESS to reduce spinning reserve         |
|   | BESS   |  | Long-term rate design changes                      |
|   | Seward on own generation                                   |  | Integrate gas transmission system                  |
|   | Non-ENSTAR/APC system users of gas are interrupted         |  |  |
|   | Interuptible gas customers are curtailed                   |  |  |
|   | 3rd Party Gas Marketers adjust deliveries                  |  |  |
|   | Adjust gas flows to ML&P as needed                         |  |  |
|   | Adjust gas delivery points based on deliverablity          |  |  |
| Voluntary Actions   | Retail   | Wholesale  | Wholesale  |
|   | -Switches under Public/Gov't control                       | -Matanuska Electric  | -Matanuska Electric                                |
|   | -Meet with to determine actions                            | -Homer Electric  | -Homer Electric                                    |
|   | -Switches under private control                            | -Seward Electric   | -Seward Electric                                   |
|   | Commercial   | Conservation/Efficiency                                      | Conservation/Efficiency                            |
|   | -Self-generation (not with natural gas)                    | -Smart Power   | -Smart Power                                       |
|   | -Reduce exterior/lot lighting                              | -Education   | -Education   |
|   | Residential  | -Smart metering  | -Smart metering                                    |
|   | -Action chart  | -Energy audits   | -Audits  |
|   | Utilities own facilities                                   | Disable selected street light circuits?                      | Dispatchable alternative self-generation           |
|   | -Cut non-essential load at utility facilities              | Reduce essential gas consumption - Retail & Commercial       |  |
|   | Reduce non essential gas consumption - Retail & Commercial |  |  |
| Interruptions   | Feeders prioritized  | Feeders prioritized  | Feeders prioritized                                |
|   | -Shared responsibility among utilities                     | -Shared responsibility among utilities                       | -Shared responsibility among utilities             |
|   | -Fairness, sensitivity to critical loads, rotation         | -Fairness, sensitivity to critical loads, rotation           | -Fairness, sensitivity to critical loads, rotation |
|   | -20 to 30 minutes per outage                               | -20 to 30 minutes per outage                                 | -20 to 30 minutes per outage                       |
|   | Gas Curtailments of Commercial Accounts                    | Gas Curtailments of Commercial Accounts                      | Gas Curtailments of Commercial Accounts            |