

# Pressure Reduction Impact Analysis

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# Staff Analyzed Four General Issues

1. Pressure Reduction scenario in WGTM
  - Staff using model in annual mode which effectively looks at AVERAGE DAY demand
  - Monthly or daily granularity could show different result
  - Performed additional analysis to cover this limitation
2. Projected End-Use Demand by Month vs. Constrained Delivery Capability
3. Projected End-Use Demand on Peak Day vs. Constrained Delivery Capability
4. Storage Refill Capability

# WGL Pressure Reduction Scenario Changes Two Key Assumptions

- PG&E backbone capacity lower to recognize
  - MAOP reductions on specific lines ordered by CPUC
  - results of Class Location Study
  - hydrostatic testing/replacement
- Reduced PG&E Backbone capacity by 500 MMcfd
  - Redwood 2050 => 1850   Baja 1140 => 830
  - based on Pipe Ranger mid-July as “available” through year-end

# WGTM Scenario Shows Nothing Exciting or Unusual

- All load served – DAILY ANNUAL AVERAGE
- Some annual price changes (perturbations)
  - Not consistent in direction year to year
  - Small on a percentage basis
  - Occur across entire US, including Henry Hub, not just California
- Additional small shift in flows from Redwood to Baja given that Baja was less utilized before the constraint

# Serving Cold Day Demand May Require Independent Storage Use

<i>MMcf/d</i>	<i>Dec 8 2009 Recorded</i>	<i>Dec 9 2009 Recorded</i>	<i>Winter Peak Day Demand from 2010 California Gas Report</i>	<i>Expected Deliverability for Average Day</i>
<i>Demand</i>				
Core	2,840	2,926	2850	
Industrial	677	692	420	
Electric Generation	551	528	1000	
Off-System	27	68	0	
Total	4,095	4,214	4,270	
<i>Capacity &amp; Supply</i>				
Redwood	901	809	1,800	1,800
Baja	1,031	1,051	733	733
Silverado (CA Production)	120	120	130	130
PG&E Storage	1,344	1,228	1,100	350
Independent Storage	699	1,006	507	0
Total	4,095	4,214	4,270	3,013

# Storage Refill for Core Looks OK

- Early question was what impact reduced capacity would have on the storage refill
  - Looked first are refill to core customers
  - adding daily injections/withdrawals reported on Pipe Ranger got to reasonable Nov 1 core inventory
- Independent storage harder to assess since 0 inventory start point unknown
  - noncore customers need to be diligent in filling storage