OE ENERGY
MARKET SNAPSHOT
West Version – Data through September 2015

Office of Enforcement
Federal Energy Regulatory Commission
Oct 2015
Natural Gas and Fuels Markets

West
## West Natural Gas Market: Annual Hub Prices

### West Day Ahead Natural Gas Prices
Averaged Annually/Seasonally

<table>
<thead>
<tr>
<th></th>
<th>Average Day Ahead Prices ($/MMBtu)</th>
<th>SoCal Border</th>
<th>Opal Wyoming Plant</th>
<th>El Paso Permian</th>
<th>GTN Malin Oregon</th>
<th>Henry Hub</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>Annual</td>
<td>2.91</td>
<td>2.68</td>
<td>2.67</td>
<td>2.73</td>
<td>2.75</td>
</tr>
<tr>
<td></td>
<td>Summer</td>
<td>2.83</td>
<td>2.58</td>
<td>2.61</td>
<td>2.61</td>
<td>2.69</td>
</tr>
<tr>
<td></td>
<td>Winter 2012/2013</td>
<td>3.62</td>
<td>3.46</td>
<td>3.38</td>
<td>3.52</td>
<td>3.47</td>
</tr>
<tr>
<td>2013</td>
<td>Annual</td>
<td>3.83</td>
<td>3.65</td>
<td>3.63</td>
<td>3.71</td>
<td>3.72</td>
</tr>
<tr>
<td></td>
<td>Summer</td>
<td>3.82</td>
<td>3.61</td>
<td>3.63</td>
<td>3.67</td>
<td>3.76</td>
</tr>
<tr>
<td></td>
<td>Winter 2013/2014</td>
<td>4.89</td>
<td>4.88</td>
<td>4.68</td>
<td>4.88</td>
<td>4.61</td>
</tr>
<tr>
<td>2014</td>
<td>Annual</td>
<td>4.50</td>
<td>4.35</td>
<td>4.26</td>
<td>4.39</td>
<td>4.32</td>
</tr>
<tr>
<td></td>
<td>Summer</td>
<td>4.34</td>
<td>4.07</td>
<td>4.07</td>
<td>4.14</td>
<td>4.18</td>
</tr>
<tr>
<td></td>
<td>Winter 2014/2015</td>
<td>3.15</td>
<td>3.03</td>
<td>3.01</td>
<td>3.06</td>
<td>3.21</td>
</tr>
<tr>
<td>2015 YTD</td>
<td>Annual</td>
<td>2.71</td>
<td>2.56</td>
<td>2.57</td>
<td>2.60</td>
<td>2.76</td>
</tr>
<tr>
<td></td>
<td>Summer</td>
<td>2.71</td>
<td>2.55</td>
<td>2.55</td>
<td>2.60</td>
<td>2.72</td>
</tr>
<tr>
<td></td>
<td>Winter 2015/2016</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
Source: ICE

Updated Oct-2015
West Natural Gas Market: Day-Ahead Prices

**West Daily Day-Ahead Prices**

- SoCal Border
- Opal Wyoming Plant
- El Paso Permian
- GTN Malin Oregon

**Notes:**
- Updated Oct-2015

Source: ICE
West Daily Day-Ahead Basis

- SoCal Border Basis
- Opal Wyoming Plant Basis
- El Paso Permian Basis
- GTN Malin Oregon Basis

Notes:
Source: ICE
Updated: Oct-2015
West Average Monthly Basis

Notes:
Source: ICE

Updated Oct-2015
West Natural Gas Market: Daily Demand

Daily Rockies Natural Gas Demand All Sectors

Source: Derived from Bentek Energy data

Note: Rockies is defined as Montana, Wyoming, Colorado, and Utah

Updated: Oct 2015
West Natural Gas Market: Daily Demand

Daily Southwest and Northwest Natural Gas Demand All Sectors

Source: Derived from Bentek Energy data
Note: Data derived from interstate natural gas pipeline flows.
Southwest is defined as New Mexico, Arizona, California, Nevada and the Northwest is defined as Idaho, Oregon, and Washington

Updated: Oct 2015
West Natural Gas Consumption for Power Generation

Source: Derived from Bentek Energy data

Note: West is defined as Montana, Wyoming, Colorado, Utah New Mexico, Arizona, California, Nevada, Idaho, Oregon, and Washington

Updated: Oct 2015
Electricity Markets

West
CAISO Real Time Prices—Two Year History

- Last 30 days SCE Daily Avg Real Time Price was $43.13.
- Last 30 days SDG&E Avg Real Time Price was $43.34.
- Last 30 days PG&E Daily Avg Real Time Price was $38.47.

Source: Genscape via Bloomberg

Updated: Oct 2015
Last 30 days average on peak load was 26 GW.
Last 30 days average off peak load was 21 GW.

Source: Genscape via Bloomberg

Updated: Oct 2015
Mountain Regional Generation Mix, Jun '13 to Jul '15

Source: EIA via Bloomberg

- Coal Generation in Jul '15 was 18444 GWh (52%).
- Gas Generation in Jul '15 was 9740 GWh (27%).
- Hydro Generation in Jul '15 was 2583 GWh (7%).
- Othr Renew Generation in Jul '15 was 1800 GWh (5%).
- Nuclear Generation in Jul '15 was 2910 GWh (8%).
- Oil Generation in Jul '15 was 20 GWh (0%).
- Total Generation in Jul '15 was 35497 GWh.

States: AZ, CO, ID, MT, NM, NV, UT, WY
Hydro Generation in Jul '15 was 9933 GWh (30%).
Gas Generation in Jul '15 was 14607 GWh (44%).
Nuclear Generation in Jul '15 was 2107 GWh (6%).
Renew Generation in Jul '15 was 5434 GWh (16%).
Coal Generation in Jul '15 was 1256 GWh (4%).
Oil Generation in Jul '15 was 13 GWh (0%).
Total Generation in Jul '15 was 33350 GWh.

States: CA, OR, WA

Source: EIA via Bloomberg

Updated: Oct 2015