The Transmission Capacity Gap: Comparison of Projected Increases in Electric Demand and Transmission Capacity, 1999-2008
(Source: North American Reliability Council, Reliability Assessment 1999-2008)

Short Term
- Transmission congestion will worsen and as a result, transactions will continue to be curtailed until...appropriate congestion relief methods are implemented.
- As competitive electricity markets continue to develop, it is likely that the transmission system will be operated at levels of power flows and in configurations not previously experienced.

Long Term
- Unless proper incentives can be developed to encourage investment in new transmission facilities and siting problems can be resolved, few new transmission facilities and reinforcements will be constructed.
(Source: North American Reliability Council, Reliability Assessment 2000-2009)
**THE TRANSMISSION CAPACITY GAP:**
**COMPARISON OF PAST INCREASES IN ELECTRIC DEMAND AND TRANSMISSION CAPACITY, 1985-1997**
(Source: Edison Electric Institute)

![Graph showing percentage increase in electricity demand and transmission lines built from 1985 to 1997.]

- While additions to transmission are anemic, new generation projects are being added seemingly every week.

- Transmission investments (in constant, inflation adjusted dollars) have been declining for almost 25 years at an average rate of $115 million per year.

- Between 1989 and 1998, transmission capacity normalized by summer peak demand declined in each of the ten reliability council regions.

Kelliher, Joseph

From: Angulo, Veronica
To: Kelliher, Joseph
Subject: DEM ENERGY PLAN SUMMARY

Sent: Thursday, March 22, 2001 3:50 PM

You may already have seen this:

FACTBOX: DEMOCRAT, REPUBLICAN ENERGY PLANS DETAILED

WASHINGTON, March 22 (Reuters) - Democratic lawmakers offered a broad energy plan on Thursday to encourage conservation and alternative energy sources.

The legislation follows a wide-ranging Republican bill in February that proposed to boost domestic oil and gas drilling by opening the Arctic National Wildlife Refuge.

President George W. Bush, a former Texas oilman, has endorsed drilling in the Arctic refuge and appointed a White House task force to make additional energy recommendations. That report is due in April.

The following outlines key points in the Democrats' and Republicans' energy bills:

DEMOCRAT BILL:
* Require Transportation Department to develop regulations to increase automobile fuel efficiency.
* Require states to review ways to increase oil and gas production on state and private lands.
* Offer tax credits for domestic drilling when the price of oil is "extremely low" to maintain stable supplies.
* Offer grants and tax incentives for new electric power lines and expansion of natural gas pipelines.
* Require the Minerals Management Service to proceed with an oil and gas lease sale in the deepwater area of the Gulf of Mexico.
* Offer financial incentives for smaller power generation facilities like fuel cells and renewable energy sources.
* Streamline pipeline and hydropower dam certification procedures.
* Offer incentives for consumers to replace old appliances with more efficient models.
* Require the Environmental Protection Agency to streamline gasoline specifications to ease distribution problems and reduce price spikes.

REPUBLICAN BILL
* Open 1.5 million acres of the Arctic National Wildlife Refuge in Alaska to oil and natural gas drilling, with 10-year leases granted to companies.
* Provide a break for big oil companies by reducing their cash royalty payments to the government when oil prices fall below $18 a barrel and natural gas prices drop below $2.30 per thousand cubic feet for 90 consecutive days.
* Provide a $3 per barrel tax credit to owners of wells producing less than 25 barrels per day when crude oil prices fall below $18 a barrel, for the first 1,095 barrels of oil equivalent produced.
* Provide a 50-cent tax credit on each 1,000 cubic feet of natural gas produced from low-volume wells when gas prices fall below $2.00 per thousand cubic feet.
* Reduce royalty payments to the government on oil and natural gas drilled in waters depth of more than 200 meters, when crude oil prices are below $28 per barrel and natural gas is below $3.50 per million Btus.
* Reduce time and cost of obtaining federal permits to build natural gas pipelines that cross state borders.
* Expand existing tax credits for electricity generated by renewable resources to include biomass, agricultural and animal waste, incremental hydropower, geothermal, landfill gas and steel co-generation.
* Offer tax credits of up to $100 million for clean coal technology to generate electricity with reduced air emissions. The technology would also exempt a qualifying system from any stricter emission control requirements for 10 years under the Clean Air Act.

DOE024-2367

Obtained and made public by the Natural Resources Defense Council, March/April 2002
* Offer consumer tax credits of $50 for an energy efficient refrigerator and $100 for a more efficient clothes washers.

Thursday, 22 March 2001 13:11:49

RTRS [nN22418199]
March 16, 2001

NOTE FOR: JOE KELLIHER

FROM: LARRY PETTIS
ACTING ADMINISTRATOR
ENERGY INFORMATION ADMINISTRATION

Attached are two charts sent to Vice President's Task Force following Monday's briefing.

Attachments

24963

DOE024-2369
## California In-State Sales and Generation

(Thousand Megawatthours)

<table>
<thead>
<tr>
<th>Year</th>
<th>Utilities</th>
<th>Nonutilities</th>
<th>Total</th>
<th>Utilities</th>
<th>Nonutilities</th>
<th>Total</th>
<th>Generation to Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>211,093</td>
<td>1,872</td>
<td>212,965</td>
<td>114,528</td>
<td>53,006</td>
<td>167,534</td>
<td>78.67%</td>
</tr>
<tr>
<td>1991</td>
<td>208,650</td>
<td>1,872</td>
<td>210,522</td>
<td>104,968</td>
<td>53,006</td>
<td>157,974</td>
<td>75.04%</td>
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<tr>
<td>1992</td>
<td>213,447</td>
<td>1,954</td>
<td>215,401</td>
<td>119,310</td>
<td>59,296</td>
<td>178,606</td>
<td>82.92%</td>
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<tr>
<td>1993</td>
<td>210,500</td>
<td>2,014</td>
<td>212,514</td>
<td>125,782</td>
<td>62,753</td>
<td>188,535</td>
<td>88.72%</td>
</tr>
<tr>
<td>1994</td>
<td>213,684</td>
<td>2,128</td>
<td>215,812</td>
<td>126,749</td>
<td>63,156</td>
<td>189,905</td>
<td>88.00%</td>
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<tr>
<td>1995</td>
<td>212,605</td>
<td>1,607</td>
<td>214,212</td>
<td>121,881</td>
<td>62,832</td>
<td>184,713</td>
<td>86.23%</td>
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<tr>
<td>1996</td>
<td>218,112</td>
<td>2,105</td>
<td>220,217</td>
<td>114,706</td>
<td>63,935</td>
<td>178,641</td>
<td>81.12%</td>
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<tr>
<td>1997</td>
<td>227,876</td>
<td>2,434</td>
<td>230,310</td>
<td>112,183</td>
<td>62,422</td>
<td>174,605</td>
<td>75.81%</td>
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<tr>
<td>1998</td>
<td>226,396</td>
<td>19,842</td>
<td>246,238</td>
<td>114,928</td>
<td>73,832</td>
<td>188,760</td>
<td>76.66%</td>
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<tr>
<td>1999</td>
<td>211,981</td>
<td>39,174</td>
<td>251,155</td>
<td>87,875</td>
<td>96,754</td>
<td>184,629</td>
<td>73.51%</td>
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</tbody>
</table>

**Sources:** Electric Power Annuals, 1990-1999, Form EIA-860b and predecessor form.

**Notes:** Nonutility generation and power marketer sales in California for 1990 was not published so 1991 value was used as proxy. Nonutility end-use sales includes power marketer sales. Power marketer data is only available for 1997 and later.
California Natural Gas Consumption and Supply
(trillion cubic feet)

Consumption

Out-of-State Supply

In-State Supply

California Natural Gas Consumption and Supply  
(trillion cubic feet)

<table>
<thead>
<tr>
<th>Year</th>
<th>Consumption (Tcf)</th>
<th>Out-of-State Supply (Tcf)</th>
<th>In-State Supply (Tcf)</th>
</tr>
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<tbody>
<tr>
<td>1990</td>
<td>1.86</td>
<td>1.62</td>
<td>0.24</td>
</tr>
<tr>
<td>1991</td>
<td>1.97</td>
<td>1.62</td>
<td>0.35</td>
</tr>
<tr>
<td>1992</td>
<td>2.03</td>
<td>1.61</td>
<td>0.42</td>
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<tr>
<td>1993</td>
<td>1.98</td>
<td>1.65</td>
<td>0.32</td>
</tr>
<tr>
<td>1994</td>
<td>2.12</td>
<td>1.89</td>
<td>0.24</td>
</tr>
<tr>
<td>1995</td>
<td>1.93</td>
<td>1.69</td>
<td>0.23</td>
</tr>
<tr>
<td>1996</td>
<td>1.81</td>
<td>1.55</td>
<td>0.26</td>
</tr>
<tr>
<td>1997</td>
<td>1.95</td>
<td>1.67</td>
<td>0.28</td>
</tr>
<tr>
<td>1998</td>
<td>2.01</td>
<td>1.82</td>
<td>0.20</td>
</tr>
<tr>
<td>1999</td>
<td>2.15</td>
<td>1.79</td>
<td>0.35</td>
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