

# Office of Energy Projects

## Energy Infrastructure Update

For September 2011

### Natural Gas Highlights

- The Commission authorized Gulf LNG to place into service its LNG import terminal and connecting pipeline near Pascagoula, MS. The Gulf LNG terminal and pipeline will have a sendout and delivery capacity of 1,500 MMcf/d.
- Transco and Florida Gas placed into service their Pascagoula Expansion and Mobil Bay Lateral Extension Projects which will provide 810 MMcf/d and 343 MMcf/d of firm transportation of natural gas from the Gulf LNG terminal in Pascagoula, MS.
- Tricor Ten received authorization to convert a depleted oil and gas reservoir in Kern County, CA to a new natural gas storage facility. This storage facility will have a working gas capacity of 22.4 Bcf .
- Tennessee and Dominion received authorization to construct and operate their Northeast Supply Diversification and Ellisburg to Craig Projects located in northern PA and western NY. These projects will provide 250 MMcf/d and 150 MMcf/d of new capacity for the transportation of Appalachian supplies to northeastern markets.
- DCP Midstream filed an application to construct and operate its LaSalle Residue Project. This project is designed to provide 230 MMcf/d of capacity from a planned processing plant in Weld County, CO to an interconnection with CIG.

### Natural Gas Activities in September 2011

Status	No. of Projects	Storage Capacity (Bcf)	Deliverability (MMcf/d)	Capacity (MMcf/d)	Miles of Pipeline	Compression (HP)
<b>Pipeline</b>						
Placed in Service	5			2,920.9	58.2	78,000
Certificated	2			400.0	7.3	10,800
Proposed	2			330.0	11.3	22,000
<b>Storage</b>						
Placed in Service	1	0.5	10			0
Certificated	1	22.4	1,000			42,000
Proposed	0	0.0	0			0
<b>LNG</b>						
Placed in Service	1	6.8	1,500			0
Certificated	0	0	0			0
Proposed	0	0	0			0

Source: Staff Database

### Natural Gas Activities through September 30, 2011 Through September 30, 2010

Status	No. of Projects	Storage Capacity (Bcf)	Deliverability (MMcf/d)	Capacity (MMcf/d)	Miles of Pipeline	Compression (HP)
<b>Pipeline</b>						
Placed in Service through September 30, 2010	21 17			11,131.4 6,472.5	1,542.7 413.5	723,771 217,818
Certificated through September 30, 2010	13 18			3,107.7 8,641.4	268.0 1,512.7	203,405 517,454
<b>Storage</b>						
Placed in Service through September 30, 2010	7 11	33.8 70.7	2,555 4,221			25,483 32,180
Certificated through September 30, 2010	11 15	173.7 125.7	4,495 4,864			143,010 122,404
<b>LNG</b>						
Placed in Service through September 30, 2010	2 1	23.2 4.22	3,500 400			0 0
Certificated through September 30, 2010	0 0	0 0	0 0			0 0

Source: Staff Database

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### Hydropower Highlights

- On September 1, 2011, Ocean Renewable Power Company, LLC filed a final pilot license application for its proposed 0.3-MW Cobscook Bay Tidal Energy Project No. 12711. The proposed hydrokinetic project would be located in Cobscook Bay, in Washington County, Maine. The application was prepared using the Commission's licensing procedures for pilot projects.
- On September 14, 2011, an order issuing exemption from licensing (conduit) was issued to George Wenschhof for the 23-kW Meeker Wenschhof Project No. 14230, located in Colorado. This was the first order issued pursuant to the Colorado MOU and was issued in less than 2 months.

### Hydropower Activities in September 2011

Status	Conventional		Pumped Storage		Hydrokinetic		Total No. of Projects	Total Capacity (MW)
	No.	Capacity (MW)	No.	Capacity (MW)	No.	Capacity (MW)		
<b>Filed</b>								
License	0	0	0	0	1	0.300	1	0.300
5-MW Exemption	0	0	0	0	0	0	0	0
Capacity Amendment	1	1.700	0	0	0	0	1	1.700
Conduit Exemption	4	2.927	0	0	0	0	4	2.927
<b>Issued</b>								
License	0	0	0	0	0	0	0	0
5-MW Exemption	0	0	0	0	0	0	0	0
Capacity Amendment	2	9.950	0	0	0	0	2	9.950
Conduit Exemption	1	0.023	0	0	0	0	1	0.023
<b>Placed in Service</b>								
License	0	0	0	0	0	0	0	0
5-MW Exemption	0	0	0	0	0	0	0	0
Capacity Amendment	0	0	0	0	0	0	0	0
Conduit Exemption	0	0	0	0	0	0	0	0

### Hydropower Activities Year to Date (through September 30, 2011)

Status	Conventional		Pumped Storage		Hydrokinetic		Total No. of Projects	Total Capacity (MW)
	No.	Capacity (MW)	No.	Capacity (MW)	No.	Capacity (MW)		
<b>Filed</b>								
License	10	342.923	0	0	1	0.300	11	343.223
5-MW Exemption	4	1.346	0	0	0	0	4	1.346
Capacity Amendment	9	58.345	0	0	0	0	9	58.345
Conduit Exemption	12	10.176	0	0	0	0	12	10.176
<b>Issued</b>								
License	7	72.910	0	0	0	0	7	72.910
5-MW Exemption	0	0	0	0	0	0	0	0
Capacity Amendment	11	44.847	0	0	0	0	11	44.847
Conduit Exemption	5	1.748	0	0	0	0	5	1.748
<b>Placed in Service</b>								
License	2	13.000	0	0	0	0	2	13.000
5-MW Exemption	2	0.375	0	0	0	0	2	0.375
Capacity Amendment	1	3.000	0	0	0	0	1	3.000
Conduit Exemption	4	1.365	0	0	0	0	4	1.365

Source: Staff Database

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### Electric Generation Highlights

- Southern Montana Electric Generation & Transmission Cooperative's 45-MW natural gas-fired Highwood Generating Station near Great Falls, Montana is online. Southern Montana's original plan was for a coal-fired power plant but switched its fuel to natural gas due to environmental considerations.
- Vert-I-Go Wind L.L.C.'s 5-MW Clovis Wind Farm in the City of Clovis, New Mexico has come online. Vert-I-Go builds midsize vertical-axis wind turbines which are different from most wind turbines which are mostly horizontal-axis. The vertical-axis allows for a gearbox and generator to be on the ground, an advantage in maintenance and operation. The power generated will be connected to distribution lines instead of transmission lines like most turbines.
- Iberdrola Renewable's 20-MW Copper Crossing Solar Ranch in Florence, Arizona has come online. Copper Crossing is the largest solar project in Arizona. More than 100 schools in the Valley school districts are purchasing a total 7,840 kW from the plant for 10 years. Copper Crossing Solar Ranch contains approximately 66,000 solar panels on 144 acres.
- Xcel Energy and SunEdison's first three of five solar power plants project are online. The three projects totaling 32.3 MW are in Lea and Eddy Counties, New Mexico, including a 10.9-MW photovoltaic farm in Carlsbad, and two 10.7-MW plants in Jal. The remaining two installations with 21 MW are expected to come online by November 2011. When all five sites are completed, SunEdison's solar project will generate more than 1.9 million MWh over the next 20-years, enough energy for more than 186,000 U.S. homes.
- NJR Clean Energy Ventures announced two completed solar projects in New Jersey. The 4.1-MW Vineland Mays Landing Solar in Vineland, and the 3.6-MW Village at Manalapan Village Solar. Electricity generated from both projects will be sold to the wholesale market.
- Constellation Energy's 4.8-MW photovoltaic West Vineland project in Vineland, New Jersey is online. The electricity generated will be sold to Vineland Municipal Electric Utility under a 25-year power purchase agreement.
- NRG Solar's 2-MW solar installation at Redskin's FedEx Field in Landover, Maryland is online. The project includes 8,000 solar panels which will provide shaded parking in an 842-car lot, and provide 20 percent of the electricity needed on game days.

### New Generation In-Service (New Build and Expansion)

Primary Fuel Type	September 2011		January – September 2011 Cumulative		January – September 2010 Cumulative	
	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)
Coal	0	0	12	1,680	24	6,382
Natural Gas	1	45	72	8,812	71	5,108
Nuclear	0	0	0	0	0	0
Oil	0	0	3	7	7	205
Water	1	0.15	9	19	11	23
Wind	1	5	82	3,515	47	2,094
Biomass	0	0	52	226	60	278
Geothermal Steam	0	0	2	23	0	0
Solar	12	70	128	393	43	120
Waste Heat	0	0	1	135	4	96
Other	0	0	9	20	0	0
<b>Total</b>	<b>15</b>	<b>120</b>	<b>370</b>	<b>14,831</b>	<b>267</b>	<b>14,305</b>

Source: Data derived from Ventyx Global LLC, Velocity Suite.

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## Energy Infrastructure Update

For September 2011

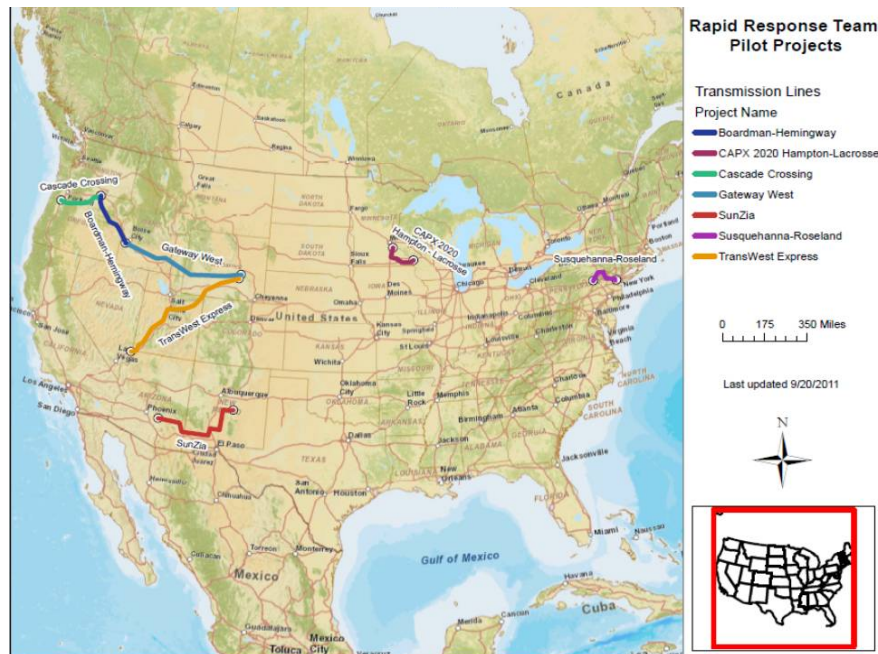
### Total Installed Operating Generation Capacity

Primary Fuel Type	Installed Capacity (GW)	% of Total Capacity
Coal	343.80	30.03%
Natural Gas	476.67	41.63%
Nuclear	108.36	9.46%
Oil	52.70	4.60%
Water	99.52	8.69%
Wind	43.43	3.79%
Biomass	13.59	1.19%
Geothermal Steam	3.40	0.30%
Solar	1.55	0.14%
Waste Heat	0.97	0.08%
Other	1.03	0.09%
<b>Total</b>	<b>1,145.01</b>	<b>100.00%</b>

Source: Data derived from Ventyx Global LLC, Velocity Suite.

## Electric Transmission Highlights

- The Federal Government's Rapid Response Team for Transmission (RRTT) selected seven transmission projects for an accelerated permitting process. The seven transmission projects selected focus on bringing renewable energy to the market.



- In September, the Bonneville Power Administration plans to begin construction of the \$185 million, 500-kv Big Eddy-Knight transmission line. The 28 mile long project will connect the Big Eddy substation in Oregon to the new Knight substation in Washington. It is expected to be completed in February 2013.

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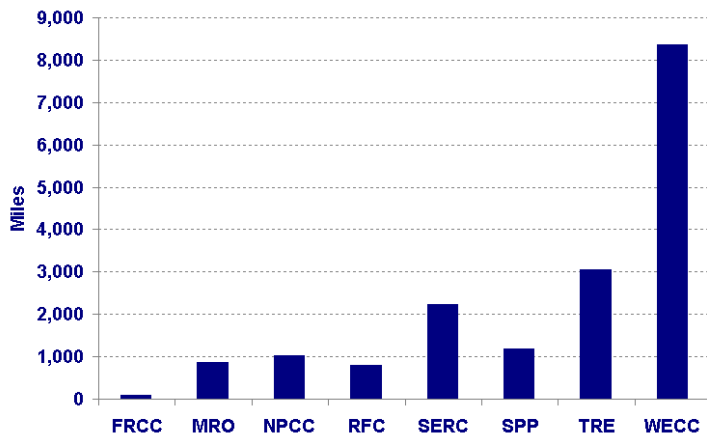
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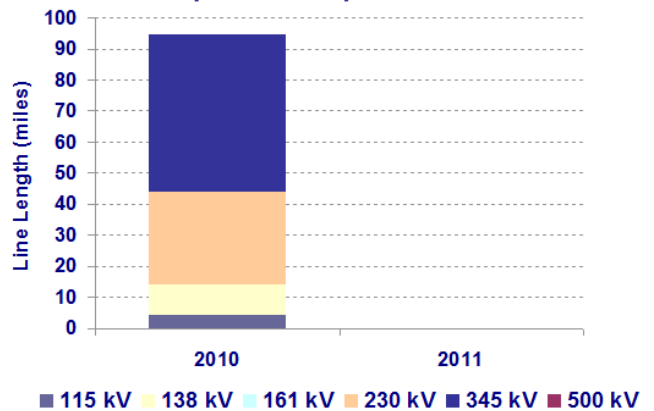
- In September, the Western Electricity Coordinating Council released a 10-year regional transmission plan for the Western Interconnection. The assessment included 44 transmission projects totaling 5,500 miles with an estimated cost of \$20 billion.

Voltage (kV)	Transmission Projects Completed		Proposed Transmission Projects In-Service by September 2013	
	September 2011	September 2010	High Probability of Completion	All
	Line Length (miles)			
≤230	0	44.0	3,039.6	5,909.2
345	0	50.6	4,246.8	5,680.4
500	0	0	1,706.8	6,000.5
<b>Total U.S.</b>	<b>0</b>	<b>94.6</b>	<b>8,993.2</b>	<b>17,590.1</b>

**Transmission Projects with a Proposed In-Service Date by September 2013**



**Transmission Projects Completed in September**



**Sources:** Data derived from Staff Database and U.S. Electric Transmission Projects ©2011 The C Three Group, LLC

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