

# Office of Energy Projects Energy Infrastructure Update

For June 2012

## Natural Gas Highlights

- Pine Prairie placed into service Cavern 5 of its Pine Prairie Expansion Project at its Pine Prairie Energy Center located in Evangeline Parish, LA. Cavern 5 will add 10 Bcf of working gas capacity.
- Ryckman Creek Storage received authorization to place into service Phase I of its Ryckman Creek Storage Project. Phase I will add 19 Bcf of working gas capacity to the Ryckman Creek Storage facility located in Uinta County, WY.
- The Commission vacated the authorizations issued to Cheniere Corpus Christi LNG and Cheniere Pipeline to construct and operate an 2,600 MMcf/d LNG import facility and associated pipeline near Corpus Christi, TX.
- PetroLogistics received authorization to expand its Choctaw Hub storage facility in Iberville Parish, LA. The Choctaw Hub Expansion Project will provide 10.7 Bcf of working gas capacity.
- Pacific Connector commenced the Commission's pre-filing process for the Pacific Connector Gas Pipeline Project which will provide 1 Bcf/d of capacity to the proposed Jordan Cove LNG export terminal in Coos Bay, OR.
- Dominion Cove Point LNG commenced the Commission's pre-filing process to construct and operate liquefaction and pipeline facilities which will provide 750 MMcf/d of liquefaction capacity to its existing facility in Lusby, MD.

### Natural Gas Activities in June 2012

Status	No. of Projects	Storage Capacity (Bcf)	Deliverability (MMcf/d)	Capacity (MMcf/d)	Miles of Pipeline	Compression (HP)
<b>Pipeline</b>						
Placed in Service	0			0.0	0.0	0
Certificated	1			300.0	0.3	0
Proposed	3			1,824.8	234.0	28,000
<b>Storage</b>						
Placed in Service	3	31.0	480			33,000
Certificated	3	5.6	1,365			26,470
Proposed	0	0.0	0			0
<b>LNG (Import &amp; Export)</b>						
Placed in Service	0	0	0			0
Certificated (Export)	0	0	0			0
Proposed (Export)	1	0	750			0

Source: Staff Database

### Natural Gas Activities through June 30, 2012

#### Through June 30, 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	4			374.3	31.7	7,000
through June 30, 2011	13			6,214.5	743.2	431,045
Certificated	11			2,742.8	97.0	74,400
through June 30, 2011	6			1,816.7	188.3	77,230
<b>Storage</b>						
Placed in Service	6	36.2	630			33,000
through June 30, 2011	5	15.3	2,545			6,283
Certificated	7	52.8	1,700			49,020
through June 30, 2011	6	103.3	2,720			58,710
<b>LNG (Import &amp; Export)</b>						
Placed in Service	0	0	0			0
through June 30, 2011	1	16.4	2,000			0
Certificated (Export)	1	0	2,600			0
through June 30, 2011	0	0	0			0

Source: Staff Database

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## Hydropower Highlights

- Lower South Fork LLC placed in service a conduit exemption granted for FERC Project No. 13716, Lower South Fork. It is a Pelton-style hydraulic turbine generating unit, with an estimated total generating capacity of 0.470 MW.
- Turnbull Hydro LLC was issued an Order Granting Exemption from Licensing (Conduit) for the Mary Taylor Hydro Project (FERC No. 14294), located on Bureau of Reclamation's Sun River Project in Teton County, MT. The proposed project will develop 0.890 MW.
- FPL Energy Maine Hydro LLC was issued an order amending license for the Wyman Project No. 2329, located on the Kennebec River, in Somerset County, ME, and authorizing a capacity increase of 4.310 MW through unit upgrades.
- Freedom Falls, LLC filed a small-hydro exemption application for the proposed 0.038 MW Freedom Falls Hydroelectric Project No. 14421. The project would be located on Sandy Stream in the Town of Freedom, Waldo County, ME.
- San Gabriel Valley Water Company dba Fontana Water Company filed an application for conduit exemption for the Sandhill Water Treatment Plant Hydro Project No.14428, located in San Bernardino County, CA, and will develop 0.310 MW.

### Hydropower Activities in June 2012

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	0	0	0	0
5-MW Exemption	1	0.038	0	0	0	0	1	0.038
Capacity Amendment	0	0	0	0	0	0	0	0
Conduit Exemption	1	0.310	0	0	0	0	1	0.310
<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	1	4.310	0	0	0	0	1	4.310
Conduit Exemption	1	0.890	0	0	0	0	1	0.890
<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	1	0.470	0	0	0	0	1	0.470

Source: Staff Database

### Hydropower Activities Year to Date (through June 30, 2012)

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	5	19.905	0	0	2	1.100	7	21.005
5-MW Exemption	2	0.733	0	0	0	0	2	0.733
Capacity Amendment	3	9.040	0	0	0	0	3	9.040
Conduit Exemption	11	3.180	0	0	0	0	11	3.180
<b>Issued</b>								
License	7	38.840	0	0	2	1.350	9	40.190
5-MW Exemption	2	1.125	0	0	0	0	2	1.125
Capacity Amendment	9	52.382	3	149.500	0	0	12	262.594
Conduit Exemption	7	9.500	0	0	0	0	7	9.500

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Status	Conventional		Pumped Storage		Hydrokinetic		Total No. of Projects	Total Capacity (MW)
	No.	Capacity (MW)	No.	Capacity (MW)	No.	Capacity (MW)		
<b>Placed in Service</b>								
License	2	8.530	0	0	0	0	2	8.530
5-MW Exemption	1	0.170	0	0	0	0	1	0.170
Capacity Amendment	0	0	0	0	0	0	0	0
Conduit Exemption	1	0.470	0	0	0	0	1	0.470

Source: Staff Database

### Electric Generation Highlights

- American Municipal Power Inc.'s 800 MW coal-fired Prairie State Energy Campus Phase I in Washington County, Illinois is online. The electricity output is contracted to the City of Geneva and Columbia Water and Light. A second phase with an additional 800 MW is expected to come online in December 2012.
- Hess Corp and an affiliate of ArcLight Capital Partners, LLC's 512 MW Bayonne Energy Center in Hudson County, New Jersey is online. This facility consists of eight 64 MW quick-start Rolls Royce natural gas-fired units. It is a "black start" energy source designed to provide power during sudden peaks in energy needs to New York City (NYISO Zone J), without exporting any of New Jersey's existing power supply.
- Idaho Power Company's 300 MW Langley Gulch Power Plant in Payette County, Idaho is online. The facility is a combined cycle combustion turbine technology, consists of two turbines, one fired by natural gas, the other by steam from the exhaust heat.
- Vineland Municipal Electric Utility's 75 MW Howard M. Down 11 in Cumberland County, New Jersey is online. This project is fired by natural gas and residual fuel oil.
- Duke Energy Corp's 131 MW Cimarron II Windpower Project Phase I in Gray County, Kansas is online. The electricity generated is contracted to Kansas City Power And Light and TVA. The second phase of the project with 165.6 MW is expected to be operational by November 2012.
- Invenergy LLC's 213 MW Gratiot County Wind in Gratiot, Michigan is online. The electricity generated is purchased by Detroit Edison and DTE Energy on long-term contracts.
- Goldwind Science and Technology's 190 MW Shady Oaks Wind Farm in Lee County, Illinois is online. The wind farm consists of 74 wind turbines. Commonwealth Edison and Xcel Energy Inc. have long-term contracts to purchase the electricity from this plant.
- PG&E's 20 MW Huron Solar Station in Fresno County, California is online. This project is built under PG&E's 500-MW Solar PV Program.
- US Geothermal Inc.'s 12 MW geothermal San Emidio Project Unit 1 in Washoe County, Nevada is online. The electricity generated is purchased by NV Energy under long-term contract. There are two other phases in development with expected online date of December 2014.
- Ormat Technologies Inc's 7.5 MW geothermal Jersey Valley Geothermal Phase 2 in Pershing County, Nevada is online. Jersey Valley Phase 1 came online in May 2011. The total capacity of Jersey Valley is now 22.5 MW. The electricity is sold to NV Energy under long-term contracts.

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## Energy Infrastructure Update

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

Primary Fuel Type	June 2012		January – June 2012 Cumulative		January – June 2011 Cumulative	
	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)
Coal	1	800	2	1,608	9	1,135
Natural Gas	11	891	40	3,708	61	5,517
Nuclear	0	0	0	0	0	0
Oil	0	0	8	13	18	37
Water	0	0	4	11	9	20
Wind	7	455	50	2,367	58	2,312
Biomass	2	17	59	271	49	157
Geothermal Steam	2	19	5	87	2	23
Solar	11	39	111	588	118	227
Waste Heat	0	0	1	3	1	135
Other	0	0	0	0	9	20
<b>Total</b>	<b>34</b>	<b>2,221</b>	<b>280</b>	<b>8,656</b>	<b>334</b>	<b>9,583</b>

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

### Total Installed Operating Generating Capacity

Primary Fuel Type	Installed Capacity (GW)	% of Total Capacity
Coal	341.60	29.66%
Natural Gas	481.73	41.83%
Nuclear	105.51	9.16%
Oil	51.23	4.45%
Water	99.72	8.66%
Wind	49.48	4.30%
Biomass	14.13	1.23%
Geothermal Steam	3.55	0.31%
Solar	2.99	0.26%
Waste Heat	0.77	0.07%
Other	1.04	0.09%
<b>Total</b>	<b>1,151.74</b>	<b>100.00%</b>

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

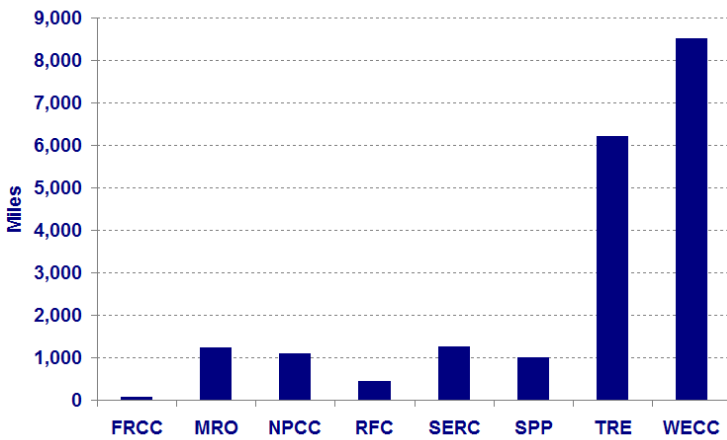
## Electric Transmission Highlights

- San Diego Gas & Electric energized the \$1.9 billion Sunrise Powerlink Transmission project which connects San Diego to Imperial Valley. The project consists of more than 110 miles of overhead 500kV and 230kV transmission and 6.2 miles of underground 230kV cable.
- Oncor completed the 138 kV, 14 mile Ector - Moss transmission line in TX for approximately \$16 million.

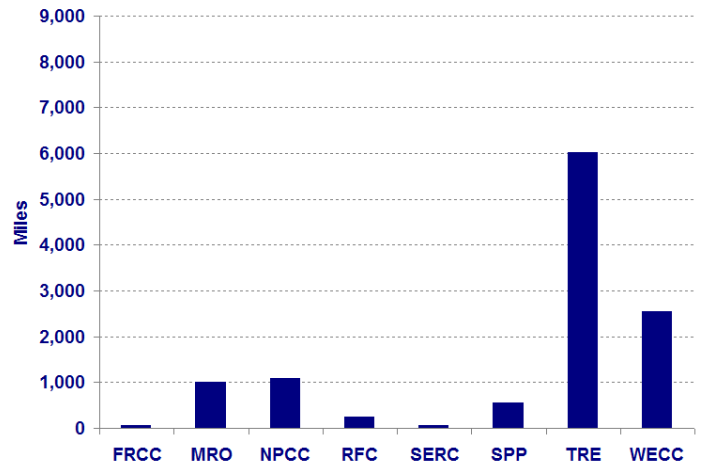
# Office of Energy Projects Energy Infrastructure Update For June 2012

Voltage (kV)	Transmission Projects Completed				Proposed Transmission Projects In-Service by June 2014	
	June 2012	June 2011	January – June 2012 Cumulative	January –December 2011 Cumulative	High Probability of Completion	All
	Line Length (miles)					
≤230	102.5	372.4	167.0	909.3	1,598.0	4,655.4
345	0	93.8	200.6	516.5	8,117.0	9,523.7
500	91.1	26.0	170.1	262.0	1,862.0	5,644.0
<b>Total U.S.</b>	<b>193.6</b>	<b>492.2</b>	<b>537.7</b>	<b>1,687.8</b>	<b>11,577.0</b>	<b>19,823.1</b>

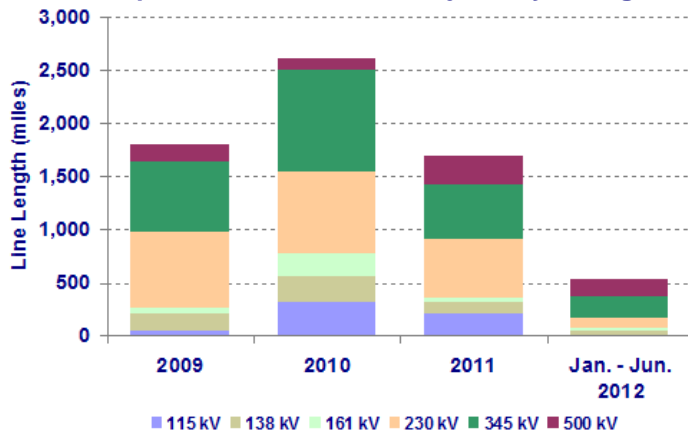
**All Transmission Projects with a Proposed In-Service Date by June 2014**



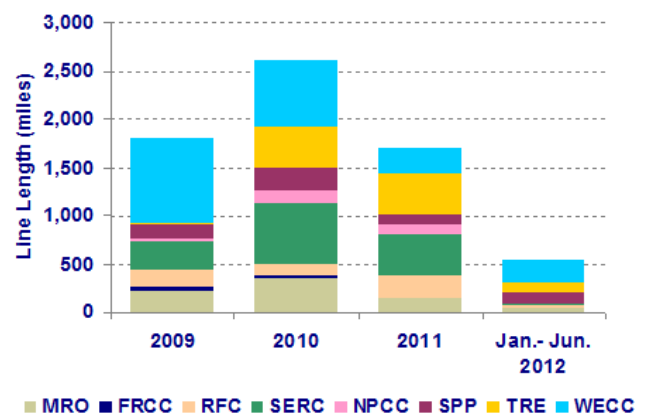
**Transmission Projects with a High Probability of being completed by June 2014**



**Completed Transmission Projects by Voltage**



**Completed Transmission Projects by Region**



Sources: Data derived from Staff Database and U.S. Electric Transmission Projects ©2012 The C Three Group, LLC

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