

# Office of Energy Projects

## Energy Infrastructure Update

For April 2012

### Natural Gas Highlights

- The Commission dismissed requests by Calais LNG and Calais Pipeline to construct and operate a 1.2 Bcf/d LNG terminal in Calais, Maine, and pipeline facilities connecting the terminal to the facilities of Maritimes & Northeast.
- The Commission vacated the authorizations issued to Jordan Cove and Pacific Connector to construct and operate a 1.0 Bcf/d LNG terminal in Coos County, OR and pipeline facilities connecting the terminal with other pipelines at the OR/CA border.
- Transco placed into service its Bayonne Lateral Project which will provide 250 MMcf/d of capacity to the new electric Bayonne Generation Plant to be located in Hudson County, NJ.
- Sabine Pass LNG received authorization to construct and operate its Sabine Pass liquefaction terminal at its existing site in Cameron Parish, LA. This project will liquefy domestic production and export approximately 2.6 Bcf/d.
- Constitution Pipeline commenced the Commission's pre-filing process for its Constitution Pipeline Project which will transport 650 MMcf/d of gas produced in PA to interconnections with pipelines in Schoharie County, NY.
- Cameron LNG and Cameron Pipeline commenced the Commission's pre-filing process for liquefaction, export, and pipeline facilities in Cameron Parish, LA which will provide 1,700 MMcf/d of export capacity.

#### Natural Gas Activities in April 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	2			250.0	3.8	0
Certificated	0			0	0	0
Proposed	5			2,717.5	202.0	113,000
<b>Storage</b>						
Placed in Service	0	0	0			0
Certificated	0	0	0			0
Proposed	0	0	0			0
<b>LNG (Import &amp; Export)</b>						
Placed in Service	0	0	0			0
Certificated (Export)	1	0	2,600			0
Proposed (Export)	1	3.4	1,700			0

Source: Staff Database

#### Natural Gas Activities through April 30, 2012

#### Through April 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 through April 30, 2011	2 9			250.0 5,413.5	3.8 673.0	0 390,735
Certificated through April 30, 2011	6 2			899.3 688.0	27.6 20.5	30,090 59,265
<b>Storage</b>						
Placed in Service through April 30, 2011	3 4	5.2 13.2	150 2,540			0 6,283
Certificated through April 30, 2011	3 4	47.2 69.2	300 2,115			19,000 47,210
<b>LNG (Import &amp; Export)</b>						
Placed in Service through April 30, 2011	0 1	0 9.8	0 1,000			0 0
Certificated (Export) through April 30, 2011	1 0	0 0	2,600 0			0 0

Source: Staff Database

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### Hydropower Highlights

- Blue Heron, LLC was issued an original license for the 2.196 MW Ball Mountain Dam Hydroelectric Project No. 13226. The project will be located at the existing U.S. Army Corps of Engineers' Ball Mountain Dam on the West River near the Town of Jamaica, Windham County, VT.
- Fairlawn Hydroelectric Company, LLC was issued an original license for the 14 MW Jennings Randolph Project No. 12715. The project will be located at the existing U.S. Army Corps of Engineers' Jennings Randolph Dam on the North Branch Potomac River in Garrett County, MD and Mineral County, WV.
- Jordan Whittaker was issued an Order Granting Exemption from Licensing (Conduit) for the 0.460 MW Eightmile Hydro Project (FERC No. 14259), to be located on an existing irrigation canal, in Lemhi County, ID.
- Three Sisters Irrigation District was issued an Order Granting Exemption from Licensing (Conduit) for the 0.700 MW Three Sisters Irrigation Hydro Project (FERC No. 14364), to be located on the north pipe of the main canal, in Deschutes County, OR.
- Konohiki Hydro Power, LLC was issued an Order Granting Exemption from Licensing (Conduit) and Dismissing Preliminary Permit Application for the 5.3 MW Puu Lua Project (FERC No. 14069), to be located on the Koke'e Ditch Irrigation System, in Kauai County, HI. The order dismissed the permit for Clean River Power 16 LLC's Project (FERC No. 13875).
- Erie Boulevard Hydropower, LP was issued an Order Amending the License for the Stewarts Bridge Project (FERC No. 2047), to be located on the Sacandaga River in Saratoga County, NY. The addition of the new 2.6 MW unit in a new powerhouse will raise the project's total installed capacity 32.6 MW.
- New York Power Authority was issued an Order Amending License for the 2,755.5 MW Niagara Project (FERC No. 2216), to be located on the Niagara River, in Niagara County, NY. The order authorized the licensee to upgrade the Lewiston Pumped Storage Development's turbine capacities 270 MW.
- FPL Energy Maine LLC, was issued an order amending license and revising annual charges for the Skelton Project No. 2527, to be located on the Saco River, in York County, ME. The order authorized the upgrade of two units to 21.6 MW.
- Whitestone Power and Communications filed an application for a hydrokinetic pilot license for the proposed 0.10 MW Whitestone Poncelet River-In-Stream-Energy-Conversion Project No. 13305. The project would be located at the confluence of the Tanana and Delta rivers near Delta Junction, AK, about 80 miles southeast of Fairbanks.
- Coulee Power Plant LLC filed an application for exemption from licensing (conduit) for the 0.060 MW P Coulee Power Plant Project (FERC No. 14384), to be located on the Twin Falls Canal Company irrigation system, in Twin Falls County, ID.
- On April 26, 2012, the FERC Chicago Regional Office was notified by the City of Black River Falls (City), licensee for the Black River Falls (FERC Project No. 3052) that it achieved operation of all three generators with an estimated total generating capacity of 1.330 MW. Initial commercial operations began on April 26, 2012.

### Hydropower Activities in April 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	1	0.100	1	0.100
5-MW Exemption	0	0	0	0	0	0	0	0
Capacity Amendment	0	0	0	0	0	0	0	0
Conduit Exemption	1	0.060	0	0	0	0	1	0.060
<b>Issued</b>								
License	2	16.196	0	0	0	0	2	16.196
5-MW Exemption	0	0	0	0	0	0	0	0
Capacity Amendment	2	7.350	1	0	0	0	3	7.350
Conduit Exemption	3	6.460	0	0	0	0	3	6.460
<b>Placed in Service</b>								
License	1	1.330	0	0	0	0	1	1.330
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

Source: Staff Database

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### Hydropower Activities Year to Date (through April 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	1	14.080	0	0	2	1.100	3	15.180
5-MW Exemption	2	0.770	0	0	0	0	2	0.770
Capacity Amendment	2	5.210	0	0	0	0	2	5.210
Conduit Exemption	7	2.139	0	0	0	0	7	2.139
<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	7	38.712	2	22.000	0	0	9	60.712
Conduit Exemption	5	8.460	0	0	0	0	5	8.460
<b>Placed in Service</b>								
License	1	1.330	0	0	0	0	1	1.330
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

Source: Staff Database

### Electric Generation Highlights

- TVA's 880 MW natural gas-fired John Sevier Combined Cycle Plant near Rogersville, Tennessee is online. This new plant will help replace two of the four units at the John Sevier Fossil Plant that are being idled at the end of the year in order to meet federal pollution standards.
- Georgia Power's second 840 MW natural gas combined cycle unit at Plant McDonough-Atkinson in Smyrna, Georgia is online. The first unit came online in December 2011 and the third unit is currently under construction with expected operational date in November 2012. These new units are replacement for two retired coal units.
- EverPower's 75 MW Highland North Wind Farm in Cambria County, Pennsylvania is online. This project consists of 30 2.5 MW Nordex turbines. EverPower's first wind project in Cambria County, the 62.5 MW Highland Wind, came online in 2009. The electricity generated supplies FirstEnergy Solutions.
- SMUD's 128 MW Solano Wind Phase 3 near Rio Vista, California is online. Phase 3 consists of 55 Vestas turbines, completes SMUD's Wind Expansion project in Solana County, with a total of 229 MW.
- Cathartes Private Investments and Nexamp's 4.5 MW Westford Solar Park in Westford, Massachusetts is online. This is New England's largest privately owned solar power facility, with 14,000 photovoltaic panels. The electricity generated is contracted to National Grid.
- Solar facilities in North Carolina: 2.5 MW North Carolina Solar I in Scotland County is online. The electricity generated is contracted to Progress Energy. 1.26 MW ESA Rooftop New Bern Solar in Craven County is online. This project consists of 5,376 Zep Solar photovoltaic modules.
- Aqua Pennsylvania's 1.8 MW Pickering Solar in Chester County, Pennsylvania is online. This solar project consists of 7,500 photovoltaic panels, provides electricity to the Pickering plant, the company's largest water treatment facility.
- Solar facilities in Los Angeles, California: Westfield Group has a total of 2.4 MW solar facilities at two shopping malls came online. City of Industry Metrolink Public Transportation 2 MW Solar PV Carports and Electric Vehicles Charging Station Project came online. The electricity generated is contracted to Southern California Edison.
- Constellation Energy's 1.98 MW solar project phase I at Mount St. Mary's University campus in Emmitsburg, Maryland is online. Phase 1 consists of 12,312 photovoltaic panels. Phase II, with 16.1 MW is under construction on the campus with expected completion in June, making it one of the largest photovoltaic farms in Maryland.
- Oneida-Herkimer Solid Waste Authority announced that its 1.6 MW landfill gas cogeneration facility in Oneida, New York is online. Methane gas collected in the landfill is used to fuel the generator. The electricity generated is contracted to New York Port Authority.

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- UTS Bioenergy LLC's 1.4 MW FuelCell Energy DFC1500 power plant installed at San Jose/Santa Clara Water Pollution Control Plant in San Jose, California is online. UTS Bioenergy has a long-term purchase agreement with San Jose/Santa Clara Water Pollution Control Plant. This facility is the largest advanced wastewater treatment in the Western U.S. treating wastewater from 1.4 million people. About two-thirds of the energy used at the facility comes from methane from the digester and landfill processes.
- Farm Power's 1 MW agricultural by-products fueled Farm Power Tillamook, in Tillamook County, Oregon is online. The electricity generated is sold and the processed manure is sent back to partner farmers as organic fertilizer free of pathogens and odor.

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

Primary Fuel Type	April 2012		January – April 2012 Cumulative		January – April 2011 Cumulative	
	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)
Coal	0	0	1	808	4	915
Natural Gas	2	1,720	11	2,708	37	2,096
Nuclear	0	0	0	0	0	0
Oil	0	0	5	9	2	5
Water	0	0	0	0	4	1
Wind	4	204	27	1,555	43	1,776
Biomass	3	4	28	54	33	132
Geothermal Steam	0	0	2	56	1	8
Solar	17	20	61	233	69	139
Waste Heat	0	0	0	0	1	135
Other	1	0	1	0	7	8
<b>Total</b>	<b>27</b>	<b>1,948</b>	<b>136</b>	<b>5,421</b>	<b>201</b>	<b>5,214</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	342.31	29.72%
Natural Gas	480.81	41.75%
Nuclear	106.25	9.22%
Oil	52.39	4.55%
Water	99.68	8.65%
Wind	48.66	4.22%
Biomass	13.87	1.20%
Geothermal Steam	3.49	0.30%
Solar	2.49	0.22%
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

- PPL has started construction on the 138 kV, \$15 million and 7 mile Coopersburg-Hickon Transmission Project in PA. The project is expected to be completed in 2013.
- Construction continues on the 117 mile, \$1.9 billion, 500 kV Sunrise Powerlink transmission line after San Diego Gas & Electric Co. (SDG&E) executives and the California Public Utilities Commission reached an agreement on stricter

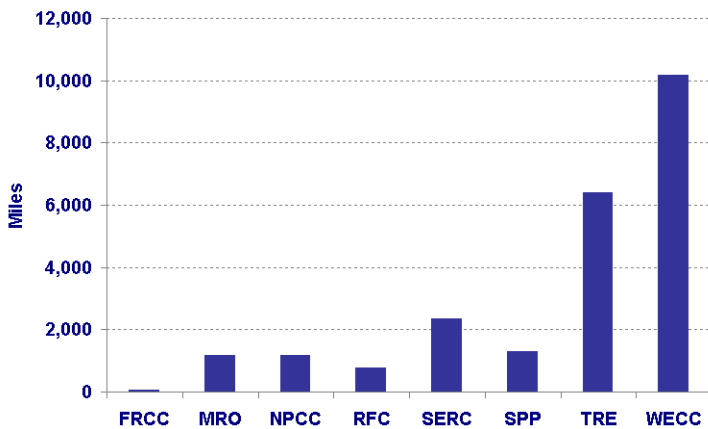
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helicopters safety rules. In the agreement SDG&E agreed to log and photograph helicopter loads. The Imperial County to San Diego transmission line is scheduled to be completed in 2012.

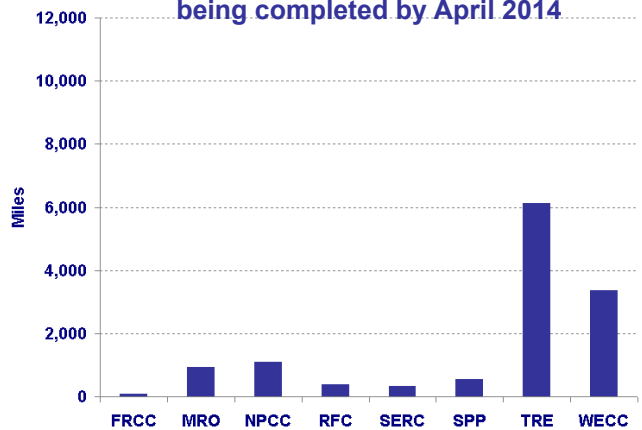
- Construction on the 214 mile, 230 kV Montana-Alberta Tie Line (MATL) transmission line resumed after landowners agreed to easements. MATL is scheduled to be completed by 2013.

Voltage (kV)	Transmission Projects Completed				Proposed Transmission Projects In-Service by April 2014	
	April 2012	April 2011	January –April 2012 Cumulative	January –December 2011 Cumulative	High Probability of Completion	All
	Line Length (miles)					
≤230	0	6.0	9.6	1,152.7	2,137.4	6,416.3
345	0	0	10.0	570.9	8,216.8	9,893.1
500	0	65.0	79.0	262.0	2,502.1	7,106.7
Total U.S.	0	71.0	98.6	1,985.6	12,856.3	23,416.1

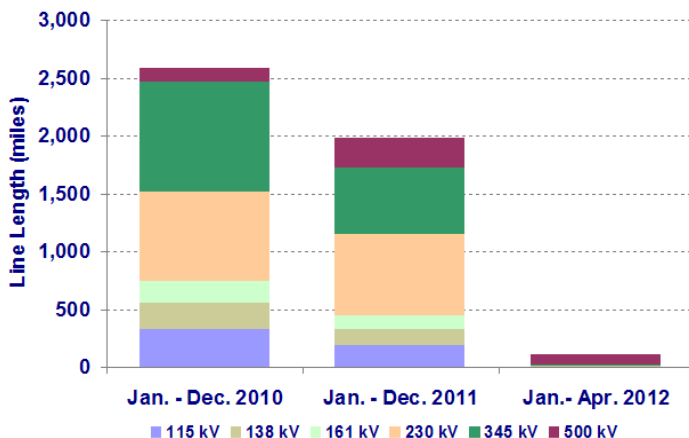
**All Transmission Projects with a Proposed In-Service Date by April 2014**



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



**Completed Transmission Projects As of April 30, 2012**



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

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