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March 29, 2012

**BY HAND DELIVERY**

Terri Lemoine Bordelon  
Louisiana Public Service Commission  
P.O. Box 91154  
Baton Rouge, Louisiana 70821-9154

**Re: *Ex Parte*: Re-study of the Feasibility of a Renewable Portfolio Standard for the State of Louisiana – LPSC Docket No. R-28271, Subdocket B**

Dear Ms. Lemoine Bordelon:

Enclosed please find an original and three copies of Entergy Gulf States Louisiana, L.L.C. and Entergy Louisiana, LLC's (collectively, the "Companies") the Joint Annual Report for 2012 on the 2010 Renewable RFP to the Louisiana Public Service Commission ("LPSC" or the "Commission") per the requirements of Section 7 of the Commission's General Order No. 12-09-10 (R-28271-A Subdocket B)(Corrected) dated December 9, 2010 ("LPSC G.O. 12-09-10"). We ask that you accept our Supplement to the Joint Annual Report for filing in the above referenced docket.

I have also enclosed three copies of the Highly Sensitive Protected Materials (HSPM) Version of the referenced filing, which is being provided to you under seal pursuant to the provisions of the LPSC General Order dated August 31, 1992, Rules 12.1 and 26 of the Commission's Rules of Practices and Procedures. The confidential materials included in the filing consist of competitively sensitive market information and the confidential information of third parties, the disclosure of which may create an artificial target for suppliers in an otherwise competitive market. For this reason, this material is confidential and commercially sensitive. The disclosure of the information contained herein would subject not only the Companies, but also their customers and third parties, to a substantial risk of harm. Accordingly, it is critical that this information remain confidential.

Please retain the original Public and HSPM Version for your files and return a date-stamped copy of each in the enclosed, self-addressed envelope.

With best regards,

A handwritten signature in cursive script that reads "Walter F. Wolf, III". The signature is written in black ink and is positioned above the printed name.

Walter F. Wolf, III

Enclosure

cc: Official Service List (via electronic mail and U.S. Mail)

**BEFORE THE  
LOUISIANA PUBLIC SERVICE COMMISSION**

<b>LOUISIANA PUBLIC SERVICE COMMISSION</b>	)	
<b>EX PARTE</b>	)	
	)	
<b>IN RE: RE-STUDY OF THE FEASIBILITY OF A</b>	)	<b>DOCKET R-28271</b>
<b>RENEWABLE PORTFOLIO STANDARD FOR</b>	)	<b>SUBDOCKET B</b>
<b>THE STATE OF LOUISIANA</b>	)	

**JOINT ANNUAL REPORT OF ENTERGY GULF STATES LOUISIANA, L.L.C.  
AND ENTERGY LOUISIANA, LLC**

Entergy Gulf States Louisiana, L.L.C. and Entergy Louisiana, LLC (collectively, the “Companies”) respectfully submit this Joint Annual Report to the Louisiana Public Service Commission (“LPSC” or the “Commission”) per the requirements of Section 7 of the Commission’s General Order No. 12-09-10 (R-28271-A Subdocket B)(Corrected) dated December 9, 2010 (“LPSC G.O. 12-09-10”) covering renewable pilot-related activities in 2011.

**Research Component**

In conjunction with the requirements of Section 3 of LPSC G.O. 12-09-10, the Companies developed and are currently promoting a Standard Offer Tariff called Rate for Renewable Energy Purchases (“Schedule REP”). Schedule REP was finalized and filed with the Commission in February 2011. In order to determine eligibility and conformance with LPSC G.O. 12-09-10 as well as Schedule REP, the Companies require an interested project developer to complete a short application. After communicating with and meeting in person with numerous interested project developers since mid-2010,

the Companies have received only two applications both of which were subsequently deemed to be complete with the proposed renewable energy projects qualifying for the program. Prior to coming on-line, qualifying renewable projects that agree to produce energy in conformance with Schedule REP are also required to execute an *Agreement for Interconnection and Purchased Power from a Qualifying New Renewable Resource*. Thus far, no qualifying renewable energy projects have yet come on-line. Highly Sensitive and Protected Materials (HSPM) Exhibit 1 includes a complete list including a status update on all proposed projects that have expressed an interest in Schedule REP.

**Request for Proposal (“RFP”) Component**

In mid-2010, Entergy Services, Inc. (“ESI”) acting on behalf of the Companies established the 2010 Renewable Request for Proposal (“RFP”) website,<sup>1</sup> issued the RFP on December 10, 2010, and required binding bids to be submitted between January 31 - February 3, 2011. Prior to bid submittal beginning on January 31, 2011, prospective bidders were required to pre-register and subsequently submit a \$5,000 fee for each registered proposal. The following table summarizes the number of bidders and associated capacity (megawatts or MW) that pre-registered, actually paid the submittal fee, and then subsequently submitted a bid.

**Table 1. Pre-Registrations, Fee Submittals, and Bid Submittals.**

	<b>Pre-Registrations</b>	<b>Fee Submittals</b>	<b>Bid Submittals</b>
# Potential Bids (Resources)	104	78	72
Capacity (MW)	9,589	7,490	7,062

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<sup>1</sup> <https://spofossil.entergy.com/ENTRFP/SEND/Renewable/RenIndex.html>

From a diversity standpoint, proposals submitted in response to the 2010 Renewable RFP represented a variety of technologies as well as a mix of Baseload and As Available capacity. Geographically, the majority of proposed resources as well as capacity were located outside of Louisiana. Qualifying renewable technologies that were not bid in to the 2010 Renewable RFP include black liquor, distributed generation, fuel cells, geothermal energy, low impact hydropower, ocean thermal wave, tidal, hydrokinetic, solar thermal, and offshore wind.

Phase I of the evaluation process, which was completed mid-April 2011, involved determining whether or not individual bids conformed to the requirements outlined in the 2010 Renewable RFP as well the provisions of LPSC G.O. 12-09-10. Based on that evaluation, six (6) proposals representing 600 MW of capacity were rejected as non-conforming. Additionally, five (5) proposals representing 468 MW of capacity were withdrawn by bidders during Phase I. At the completion of Phase I, a total of 61 proposals, from 61 unique resources, representing 5,994 MW of capacity advanced to Phase II.

Phase II of the evaluation process involved four (4) separate detailed analyses to determine and evaluate: economics, deliverability, viability, and credit. As part of performing the economics and deliverability analyses, bidders were provided the opportunity to update their interconnection, off-system transmission and/or distribution-related cost estimates by June 13, 2011. The selection of proposals for the Phase III evaluation was based on a variety of factors, including, but not limited to, relative economics, deliverability to the Entergy System, viability, and transactional considerations. Section 7.1 of LPSC G.O. 12-09-10 requires that utilities collect and



was thus rejected. Additionally, two proposals were withdrawn by bidders prior to the conclusion of Phase III. ESI concluded Phase III in November 2011 after reporting the results of the review and evaluation to the Entergy Operating Committee in order to make Primary and Secondary selections. ESI received formal approval from the Entergy Operating Committee to move forward with five (5) proposals representing 143 MW for the Primary Selection List. Additionally, the Entergy Operating Committee approved two (2) proposals representing 103 MW which were placed on the Secondary Selection List. Those seven (7) proposals collectively represent a mixture of as available and baseload products, technologies, and geographic locations. Highly Sensitive Table 3 summarizes weighted average levelized cost of electricity for Phase III.

**Highly Sensitive Table 3. Summary of Levelized Cost for Phase III.**

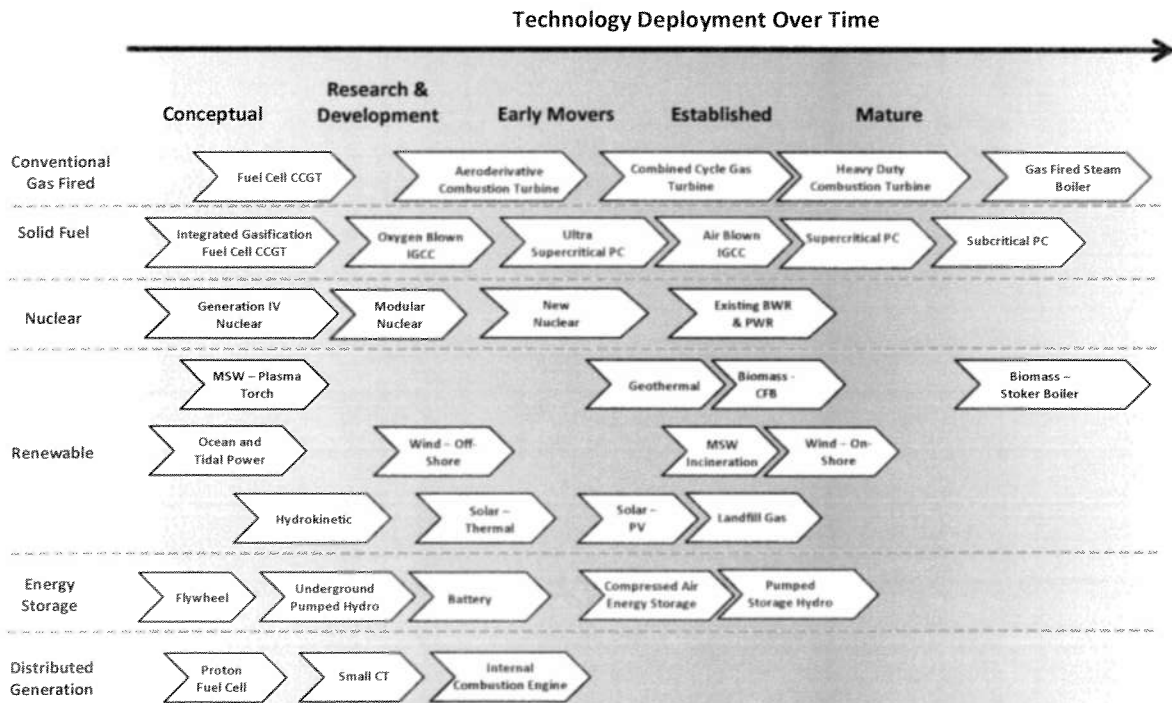

ESI is currently in negotiations to reach definitive agreements. After definitive agreements have been executed, the Companies will submit a certification request to the Commission as required under the 1983 General Order.

**2012 Integrated Resource Plan**

ESI's System Planning Organization ("SPO"), acting on behalf of the Entergy Operating Companies, is currently preparing a new System-level integrated resource plan entitled the 2012 Integrated Resource Plan ("2012 IRP"). Work on the 2012 IRP began in earnest during the latter part of 2011 and is expected to be complete during the fourth

quarter of 2012. As with any long-term planning process, developing input assumptions and scenarios takes significant effort and must encompass numerous key variables and uncertainties. The portfolio design process will test the performance of alternative portfolios under varying market conditions. Four different scenarios will be used to model power markets using a software package called Aurora. The scenarios were constructed to provide a sufficiently wide range of future outcomes so as to test the risk of portfolios. The four scenarios are named: “Reference”, “Economic Rebound”, “Green Growth”, and “Austerity Reigns”. The Reference scenario is based on ESI’s current point-of-view for key inputs such as peak load, energy sales, fuel prices, and carbon dioxide (“CO<sub>2</sub>”) cost. The other three scenarios are built around a theme or premise that attempts to describe a particular economic future.

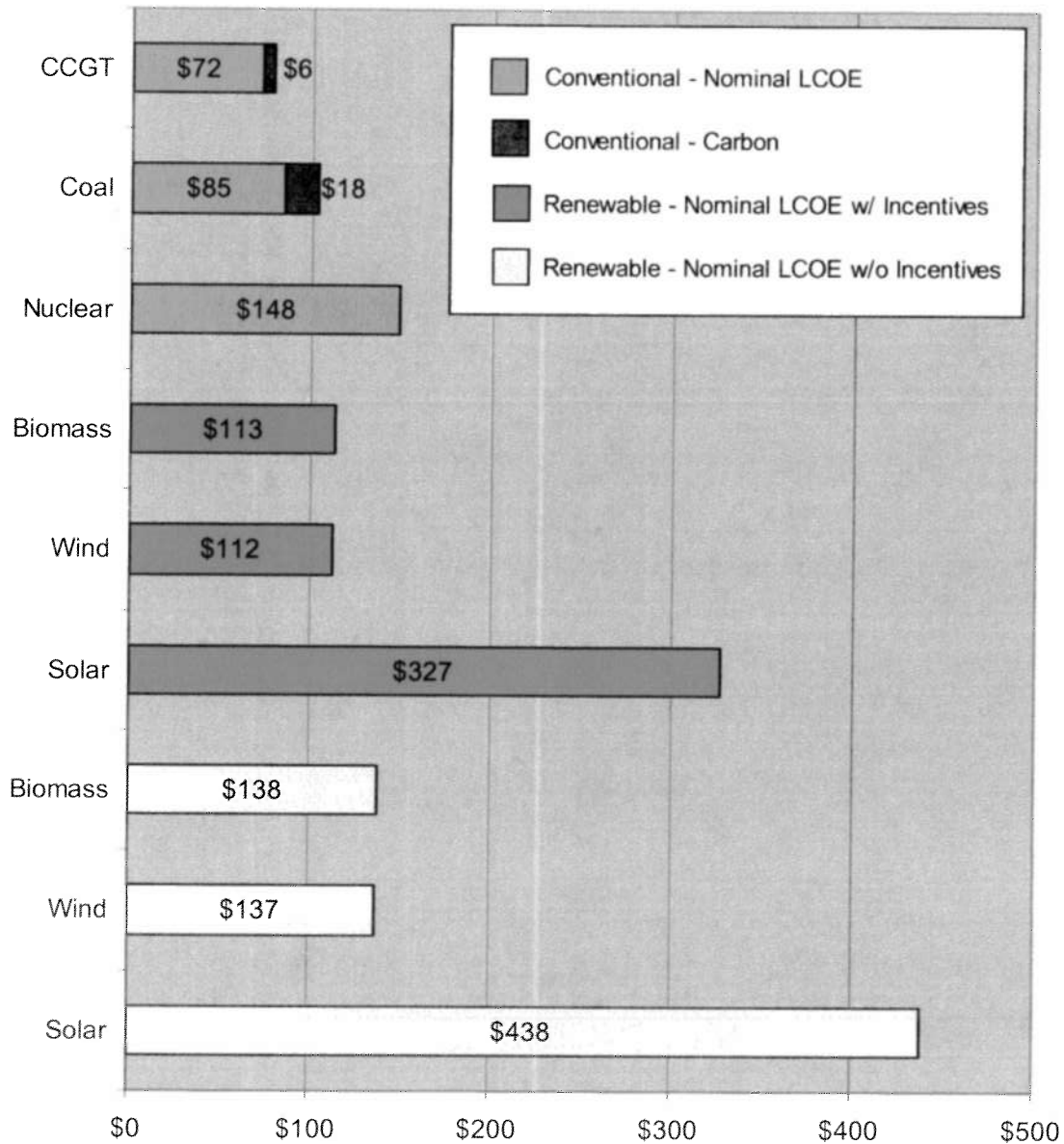
With respect to potential resource options, the planning process will consider a range of alternatives available to meet various planning objectives including the existing fleet of generating units, conventional generation, renewable generation, and demand-side management. The following chart illustrates a high level view of the life cycle (*i.e.*, maturity) of various technology alternatives that could be considered.





Many technologies listed above are still developmental and not yet commercially proven to operate reliably and economically on a utility scale. With respect to potential costs, the following charts compare conventional resource options against the most commonly installed renewable options on a levelized cost basis.<sup>2</sup>

**Chart 1. Comparison of Levelized Costs for Generation Resources (\$/MWh).**



<sup>2</sup> Beginning in 2012, bus bar cost levelized in nominal \$/MWh over expected life of resource (20 years wind and solar, 30 years biomass and CCGT, and 40 years coal and nuclear). CO<sub>2</sub> compliance cost begins in 2023 and escalates over time.

Even including potential compliance costs related to carbon legislation, conventional gas-fired resources (*i.e.*, a CCGT) are less costly on a levelized basis than the most commonly installed renewable resources regardless of whether or not incentives are considered. However, capital costs for certain technologies continued to decline in 2011. In particular, due to intense competition from China, upfront costs for solar PV equipment, particularly modules and inverters, appears to have decreased substantially over the past year. Whether or not this declining cost trend will continue in the future remains to be seen.

Additionally, the U.S. Department of Commerce issued a preliminary decision in a countervailing duty investigation on March 20, 2012, charging China with unfairly subsidizing its solar manufacturers. The Commerce Department's decision found that the Chinese government has been subsidizing its domestic solar manufacturers, who in turn have been dumping cheap solar panels in the U.S., which puts U.S. manufacturers at a competitive disadvantage.<sup>3</sup> As a result, the Department has requested that U.S. Customs begin levying anti-dumping duties on Chinese-made solar equipment, which will likely cause equipment prices to increase. A final decision is expected in June of this year. Exhibit 2 is a high level description of the Commerce Department's decision.

Results of the 2010 Renewable RFP have been used to help refine ESI SPO's understanding of the potential viability, as well as capital and operating costs, of renewable technologies for projects located both in Louisiana as well as in the broader region. For example, no bids were received from developers proposing geothermal or offshore wind projects, which is perhaps a reflection of the relative novelty and cost competitiveness of these alternatives versus more mature technologies such as biomass

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<sup>3</sup> <http://news.yahoo.com/us-sets-duties-chinese-solar-cells-193258565.html>

and land-based wind. As the 2012 IRP process unfolds, ESI will model various portfolios that contemplate the addition of renewable resources. Despite higher costs relative to conventional resources (at least based on current assumptions), adding renewable resources over time may improve fuel diversity and fuel security, which helps reduce volatility. Additionally, adding renewable resources potentially provides environmental and economic development benefits that indirectly benefit Louisiana customers.

**Section 1603 Grant Recipients**

With the 1-year extension of the U.S. Department of Treasury’s Section 1603 grant program of the American Recovery and Reinvestment Act of 2009 (“ARRA”) for 2011, it is instructive to revisit the latest information as to the types of renewable projects that developers have continued to pursue.<sup>4</sup> Table 4 summarizes the total number of grants, total dollar amount of grants, and average grant by type of technology thus far.<sup>5</sup>

**Table 4. Ranking of §1603 Grants by Technology.**

<b>Technology</b>	<b># of Grants</b>	<b>Grant Awards</b>	<b>% of Grant Awards</b>	<b>Average Grant Award</b>
Wind Total	251	\$8,085,672,497	75.12%	\$32,213,835
Solar Electricity	4,228	\$1,853,012,192	17.21%	\$438,272
Geothermal Electricity	7	\$270,223,315	2.51%	\$38,603,331
Biomass (open loop, cellulosic)	21	\$187,810,895	1.74%	\$8,943,376
Solar Thermal	241	\$132,817,309	1.23%	\$551,109
Small Wind	274	\$61,689,245	0.57%	\$225,143
Fuel Cell	26	\$54,447,892	0.51%	\$2,094,150
Landfill Gas	25	\$50,039,401	0.46%	\$2,001,576
Biomass (open loop, livestock)	30	\$22,847,785	0.21%	\$761,593
Hydropower (incremental)	9	\$16,775,523	0.16%	\$1,863,947

<sup>4</sup> The Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 extended Section 1603 of the American Recovery and Reinvestment Act of 2009. The placed-in-service deadline for grant eligibility on projects remains the end of 2012 for wind facilities, the end of 2013 for certain other renewable energy facilities such as biomass and geothermal, and the end of 2016 for solar energy facilities.

<sup>5</sup> Source: <http://www.treasury.gov/initiatives/recovery/Pages/1603.aspx>; data as of February 21, 2012.

**Table 4. Ranking of §1603 Grants by Technology (continued).**

<b>Technology</b>	<b># of Grants</b>	<b>Grant Awards</b>	<b>% of Grant Awards</b>	<b>Average Grant Award</b>
Combined Heat & Power	16	\$7,242,599	0.07%	\$452,662
Geothermal	2	\$6,651,011	0.06%	\$3,325,506
Trash Facility	5	\$6,595,802	0.06%	\$1,319,160
Geothermal Heat Pump	44	\$6,191,640	0.06%	\$140,719
Hydropower (dam)	4	\$1,076,595	0.01%	\$269,149
Marine	6	\$1,016,220	0.01%	\$169,370
Microturbine	4	\$84,051	0.00%	\$21,013
Solar Lighting	2	\$45,841	0.00%	\$22,921
<b>Totals</b>	<b>5,195</b>	<b>\$10,764,239,813</b>	<b>100.00%</b>	<b>\$5,189,824</b>

Approximately 98.4% of Section 1603 grant dollars have gone to six technologies: 1) land-based wind, 2) solar electricity (photovoltaic), 3) geothermal electricity, 4) biomass (open loop, cellulosic), 5) solar thermal, and 6) “small” wind. While there have been numerous grants awarded for wind and solar-based projects, the third largest category of grants (geothermal electricity) consists of one extremely small project in Pennsylvania (\$5,071) and six very large projects divided between California (1), Nevada (4), and Utah (1). Open loop, cellulosic biomass projects are more geographically dispersed and include projects in 13 states including states in the South.

**Table 5. §1603 Grants for Open Loop Cellulosic Biomass Projects.**

<b>State</b>	<b># of Grants</b>	<b>Grant Awards</b>	<b>Average Grant Award</b>
California	6	\$13,559,315	\$2,259,886
Colorado	1	\$296,977	\$296,977
Florida	1	\$2,962,718	\$2,962,718
Georgia	2	\$27,034,405	\$13,517,203
Massachusetts	2	\$8,740,660	\$4,370,330
Michigan	1	\$11,690,566	\$11,690,566
Montana	1	\$6,465,081	\$6,465,081
Oregon	1	\$18,643,079	\$18,643,079
Pennsylvania	1	\$39,226,475	\$39,226,475
Tennessee	1	\$53,684	\$53,684
Texas	2	\$40,087,174	\$20,043,587
Vermont	1	\$1,020,421	\$1,020,421
Washington	1	\$18,030,340	\$18,030,340
<b>Totals</b>	<b>21</b>	<b>\$187,810,895</b>	<b>\$8,943,376</b>

It appears from the most current data that renewable energy developers continue to focus on projects that are faster to deploy (solar PV) in comparison to other technologies, or are already among the lower cost renewable alternatives available (land-based wind). In contrast, technologies which appear to be more difficult and costly to deploy, involve more extensive permitting requirements (*e.g.*, environmental permits due to fuel combustion), and/or have long development lead times have received minimal Section 1603 grant awards.

To better understand where more active renewable project development is occurring in the U.S., the Companies have prepared a map of the states included as Exhibit 3 illustrating the relative level of grant awards to date. Based on the map, nearly all of the activity occurring in the region has happened in four states: Georgia, Florida, North Carolina, and Texas. Below is a breakdown of Section 1603 grant awards made to date for states in the region by technology.

**Table 6. §1603 Grants by State and Technology.**

State	Technology	# of Grants	Grant Awards	% Grant Awards
Alabama	Solar Electricity	4	\$79,590	0.0%
Arkansas	Small Wind	1	\$118,383	0.0%
	Solar Electricity	4	\$109,246	0.0%
Florida	Biomass (open loop, cellulosic)	1	\$2,962,718	0.1%
	Biomass (open loop, livestock)	1	\$891,966	0.0%
	Combined Heat & Power	1	\$12,500	0.0%
	Geothermal Heat Pump	1	\$64,849	0.0%
	Landfill Gas	1	\$1,755,944	0.1%
	Small Wind	1	\$10,478	0.0%
	Solar Electricity	168	\$82,824,708	4.1%
	Solar Thermal	43	\$124,342,920	6.1%
Georgia	Biomass (open loop, cellulosic)	2	\$27,034,405	1.3%
	Landfill Gas	1	\$793,282	0.0%
	Solar Electricity	63	\$7,583,632	0.4%
	Solar Thermal	5	\$39,590	0.0%
Kentucky	Geothermal Heat Pump	1	\$2,865	0.0%
	Solar Electricity	7	\$2,006,120	0.1%

**Table 6. §1603 Grants by State and Technology (continued).**

State	Technology	# of Grants	Grant Awards	% Grant Awards
Louisiana	Solar Electricity	11	\$682,138	0.0%
	Solar Thermal	6	\$250,769	0.0%
Mississippi	Biomass (open loop, livestock)	1	\$115,832	0.0%
	Solar Electricity	6	\$168,886	0.0%
North Carolina	Fuel Cell	1	\$402,000	0.0%
	Geothermal Heat Pump	1	\$41,242	0.0%
	Landfill Gas	2	\$3,641,329	0.2%
	Small Wind	1	\$2,682	0.0%
	Solar Electricity	59	\$41,113,235	2.0%
	Solar Thermal	3	\$116,118	0.0%
	Wind	1	\$17,557	0.0%
South Carolina	Fuel Cell	4	\$1,288,577	0.1%
	Geothermal Heat Pump	1	\$5,050	0.0%
	Hydropower (incremental)	1	\$7,685,615	0.4%
	Small Wind	1	\$4,860	0.0%
	Solar Electricity	5	\$1,822,134	0.1%
	Solar Thermal	4	\$60,739	0.0%
Tennessee	Biomass (open loop, cellulosic)	1	\$53,684	0.0%
	Combined Heat & Power	1	\$271,416	0.0%
	Landfill Gas	2	\$1,527,333	0.1%
	Solar Electricity	128	\$15,655,432	0.8%
Texas	Biomass (open loop, cellulosic)	2	\$40,087,174	2.0%
	Landfill Gas	2	\$2,953,371	0.1%
	Small Wind	5	\$77,207	0.0%
	Solar Electricity	60	\$24,420,207	1.2%
	Solar Thermal	1	\$4,770	0.0%
	Wind	18	\$1,629,792,868	80.4%
Virginia	Biomass (open loop, livestock)	1	\$480,459	0.0%
	Geothermal Heat Pump	3	\$138,981	0.0%
	Landfill Gas	2	\$1,210,851	0.1%
	Small Wind	2	\$27,164	0.0%
	Solar Electricity	23	\$1,124,367	0.1%
	Solar Thermal	7	\$824,576	0.0%
<b>Totals</b>		<b>671</b>	<b>\$2,026,701,819</b>	<b>100.0%</b>

**Table 7. §1603 Grants in the Region by Technology.**

State	Technology	# of Grants	Grant Awards	% Grant Awards
Region	Biomass (open loop, cellulosic)	6	\$70,137,981	3.5%
	Biomass (open loop, livestock)	3	\$1,488,257	0.1%
	Combined Heat & Power	2	\$283,916	0.0%
	Fuel Cell	5	\$1,690,577	0.1%
	Geothermal Heat Pump	7	\$252,987	0.0%
	Hydropower (incremental)	1	\$7,685,615	0.4%
	Landfill Gas	10	\$11,882,110	0.6%
	Small Wind	11	\$240,774	0.0%
	Solar Electricity	538	\$177,589,695	8.8%
	Solar Thermal	69	\$125,639,482	6.2%
	Wind	19	\$1,629,810,425	80.4%
<b>Totals</b>		<b>671</b>	<b>\$2,026,701,819</b>	<b>100.0%</b>

From the data summarized in Table 7, clearly solar (electricity and thermal) as well as utility-scale, land-based wind projects have received the lion’s share of Section 1603 grant awards in the region. At present, two states in the region have a mandatory Renewable Portfolio Standard (“RPS”): North Carolina and Texas. While it may not be indicative of how utilities are actually complying with their state’s RPS requirements, 91% of Section 1603 grant award funds have gone to solar projects thus far in North Carolina. In Texas, 96% of Section 1603 grant award funds have gone to utility-scale, land-based wind projects.

**Update on Promising Renewable Technologies**

For the 2010 report, the Companies reported on several technologies that may ultimately hold promise for Louisiana: 1) biomass, 2) in-stream hydrokinetic, 3) solar PV, 4) land-based wind (both on-system and off-system), 6) offshore wind, and 7) geothermal. This report provides an update on those technologies, but also adds an update on waste heat recovery. As with the 2010 annual report, technologies that are not considered commercially developed and widely available are not included. Small scale

renewable resources (typically applications less than 5 MW) are also not addressed in this report.

### **Biomass**

Projects using cellulosic biomass fuel have received the fourth highest amount of Section 1603 grant awards – approximately \$188 million (see Table 4). To date, a total of 21 projects in 13 states have received 1603 grant awards. However, proposed new biomass-fueled projects, particularly “greenfield” projects, continue to face various challenges, based on news reports and public announcements in 2011 and early 2012. Table 8, although not exhaustive, summarizes available information and the status of publicly announced cellulosic biomass-fueled projects in the region.

**Table 8. Status of Cellulosic-Fueled Biomass Projects in the Region.**

<b>Company</b>	<b>State</b>	<b>Size (MW)</b>	<b>Cost (\$M)</b>	<b>Cost (\$/kW)</b>	<b>Status (if known)</b>
American Renewables, LLC	FL	100	\$500	\$5,000	Unclear if construction has begun, but anticipated to be commercially operational in 2014; output committed to Gainesville Regional Utilities under 30-yr PPA
American Renewables, LLC	FL	100	N/A	N/A	Under development
Florida Biomass Energy, LLC	FL	60	N/A	N/A	Status unknown; announced in 2008; FPSC approved PPA with Progress Energy in 2009
Multitrade Telogia LLC	FL	14	N/A	N/A	Operating; refurbishment of existing plant originally constructed in 1986
Rentech Inc.	FL	55	\$228	\$4,145	Cancelled; began construction, but abandoned Dec 2011 due to not receiving a DoE loan guarantee
Vision / FL, LLC	FL	40	N/A	N/A	Status unknown; announced in 2008; FPSC approved PPA with Progress Energy in 2009
Earth Resources, Inc.	GA	20	N/A	N/A	Cancelled; announced in 2006; proposed to burn chicken litter and woody biomass
Fitzgerald Renewable Energy LLC	GA	50	\$139	\$2,780	Status unknown; announced in 2008; construction has not begun
Georgia Power	GA	N/A	96	N/A	On-hold; proposed in 2008; modify existing coal plant; environmental law change concerns (MACT)
Multitrade Rabun Gap LLC	GA	17	\$21.5	\$1,265	Operating; re-powered existing equipment at a shuttered textile mill; output sold to group of coops
Oglethorpe Power Corp.	GA	100	\$477	\$4,770	Suspended; originally proposed three 100 MW projects; “legislative and regulatory uncertainties”



**Table 8. Status of Cellulosic-Fueled Biomass Projects in the Region (continued).**

Pratt Paper (GA), LLC	GA	9	\$60	\$6,667	Operating; biomass gasifier uses waste stream rejects from paper-making and construction wood waste
ecoPower Generation	KY	50	\$150	\$3,000	Status unknown; announced Feb 2010
National Clean Fuels	MS	10	\$15	\$1,500	Status unknown; announced early 2011
Orangeburg County Biomass LLC	SC	35	\$98	\$2,800	Status unknown; announced April 2010
Aspen Power LLC	TX	50	\$128	\$2,560	Operating; greenfield project operational 3Q2011
East Texas Electric Cooperative	TX	50	N/A	N/A	Awaiting final approvals; construction has not begun, but company projects a 4Q2014 on-line date
Rio Grande Valley Sugar Growers, Inc.	TX	N/A	\$34	N/A	Operating; existing sugar cane processing operation; boiler expansion and related modifications
Southern Power	TX	100	\$500	\$5,000	Under construction; anticipated to be commercially operable by late 2012; output committed to Austin Energy under 20-yr PPA
Dominion (Virginia Power)	VA	153	\$165.8	\$1,084	Pending; three identical re-powering projects; received approval to proceed from State Corporation Commission (SCC) in March 2012
South Boston Energy LLC	VA	50	\$180	\$3,600	Status unknown; Virginia SCC approved project April 2011
Southeast Renewable Energy	Four States	15.2	N/A	N/A	Status unknown; announced in March 2010 that they were developing 10 or more 15.2 MW biomass-fired projects in the Southeast

Based on publicly available information, there does not appear to be any announced open loop, cellulosic biomass projects in Louisiana with the exception of Cleco Power’s on-going testing of biomass for a possible co-firing project at its Madison 3 circulating fluidized bed generating unit located near Boyce, Louisiana.

**Hydro In-Stream (Hydrokinetic)**

Based on publicly available information, there does not appear to be much to document beyond what was reported in the Companies’ 2010 report, with two exceptions. First, on January 23, 2012, the Federal Energy Regulatory Commission (“FERC”) issued its first pilot project license Verdant Power’s Roosevelt Island Tidal Energy (“RITE”)

project in New York City's East River.<sup>6</sup> Once constructed, the pilot project would feature an array of 30 underwater turbines with a combined capacity of approximately 1,000 kW and projected energy production of 2,400 MWh per year, yielding an estimated annual average capacity factor of 27.4%. In its decision, FERC acknowledged that Verdant Power's pilot project is expected to generate power at an annual cost that is \$2,081,800 higher than the cost of alternative power (*i.e.*, at a premium of approximately 87 cents/kWh), but also noted that the value of the RITE project "...lies in its successful testing and demonstration of Verdant's KHPS [kinetic hydropower system] turbine technology, and the project's ability to raise the profile of, and advance, the emergent tidal energy industry."<sup>7</sup> It remains to be seen whether or not the developer will actually proceed with construction based on the FERC pilot license being granted.

Second, companies pursuing proposed hydrokinetic projects to be located on the Mississippi River, such as Free Flow Power Corporation, Hydro Green Energy, LLC, and Northland Power Mississippi River, LLC continue to pursue studies needed to obtain approvals from various local and federal regulatory bodies and agencies. For example, during summer 2011, Free Flow Power tested a prototype turbine at a site near Baton Rouge, Louisiana. In advance of a series of public meetings during March 2012, Free Flow Power's Jon Guidroz commented that "I believe a prudent projection for FERC licenses would be toward the end of 2014 or beginning of 2015."<sup>8</sup>

Other than Free Flow Power's self reported activities, the Companies, relying on public sources, have been unable to determine the status of hydrokinetic development

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<sup>6</sup> *FERC issues license for Verdant Power's pilot tidal energy project in NYC's East River*; January 24, 2012, SNL Financial.

<sup>7</sup> *Id.*

<sup>8</sup> *Meeting on turbines set for Vicksburg*; March 27, 2012; Associated Press.

efforts underway by other companies, including MARMC Enterprises, LLC, UEK Corporation and Prospect Energy, LLC, and Morgan City.

### **Solar PV**

The Companies are not aware of any larger-scale (greater than 1 MW) solar PV projects under development in either Louisiana or the immediate region served by the Entergy Operating Companies. Virtually all solar PV investment in Louisiana to date has been residential-scale net metered systems with only a few commercial projects and even those involve multi-family housing properties. As discussed earlier in the report, capital costs of solar PV equipment, particularly modules, have declined significantly in recent years. However, even with these cost reductions, at present, the projected levelized cost of electricity generated by solar PV is less attractive compared to other renewable alternatives that are available. Given how rapidly changes are occurring, the Companies will continue to monitor the market to determine when, and if, it makes sense to consider solar PV projects.

### **Wind (Land-Based)**

Although there has been some development in the Northeast, particularly in New York and Maine, most large-scale, land-based wind development in the U.S. has been concentrated in three areas: Texas/Oklahoma, the Midwest, and the Pacific Northwest. As far as public information regarding land-based wind projects in and around the immediate four state Entergy System service area is concerned, Entergy's SPO is not aware of any other publicly announced land-based wind projects being developed in the Entergy System territory since the Companies' prior report. There also has been no

further updates to last year's report referencing a project in Arkansas being developed by Invenergy LLC that was halted.<sup>9</sup>

From a technology development standpoint, it appears that turbine manufacturers are further developing utility-scale wind turbines designed to operate at higher elevations and to be located in areas that have lower average wind speeds such as the southeastern U.S. In a recent update to a project discussed in last year's report, a company called Wind Capital Group recently obtained the Palm Beach County Commission's approval to continue developing a 200 MW project near the Everglades costing approximately \$350 million.<sup>10</sup> The project still needs local and state permits in order to break ground. In a recent development, a spokesperson for NextEra Energy Resources<sup>11</sup> suggested that land-based wind turbines would not be economical in Florida because of weak winds:<sup>12</sup>

“If wind made sense in Florida, wouldn't we be proposing wind here ourselves?” O'Sullivan said. ...“We can deliver electricity in a windy spot in the center of the country for 3 cents a kilowatt hour,” O'Sullivan said. “In Florida, we think that is anywhere from 8 to 12 cents, depending on the wind regiment and the cost of construction.”

As far as the Companies are aware, the only other state in the region with publicly announced activity is North Carolina, where several proposed land-based projects have run into various challenges. Most recently, Iberdrola Renewables halted development on the \$600 million Desert Wind project involving 150 turbines after Iberdrola was not able to negotiate a power purchase agreement with a buyer.<sup>13</sup> As more information becomes available on these and other proposed wind farm projects in the southeast, the Companies

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<sup>9</sup> *Bats scuttle plans for NW Arkansas wind farms*; October 18, 2010; Associated Press.

<sup>10</sup> *Florida's first wind farm moves forward. Birds and economics may halt development*; March 23, 2012; EnergyCentral.

<sup>11</sup> NextEra has \$13 billion in wind energy investments. NextEra Energy Resources is a subsidiary of NextEra Energy and claims to have 90 wind farms in 17 states and Canada, capable of producing approximately 8,750 MW.

<sup>12</sup> NextEra executive: Florida isn't right for a wind farm; March 22, 2012; The Palm Beach Post.

<sup>13</sup> *Buyers of wind power lacking*; December 15, 2011; The News & Observer.

will continue to monitor them to better understand project economics and potential viability for Louisiana.

### **Wind (Offshore)**

There continues to be significant planning activity along the Atlantic coast related to potential offshore wind development, but no project has actually broken ground yet. There also continues to be significant challenges with several planned projects cancelled late last year. In December 2011, NRG Energy's Bluewater Wind subsidiary terminated a 200 MW power purchase agreement with Delmarva Power & Light Co. for a project that would have been located off the coast of Delaware. According to statements made at the time<sup>14</sup>:

“...the move was largely driven by decisions of Congress to eliminate funding for the U.S. Department of Energy's loan guarantee program applicable to offshore wind, and the failure to extend the Federal Investment and Production Tax Credits for offshore wind, which expire at the end of 2012 and which have rendered the Delaware project both unfinanceable and financially untenable for the present.”

More recently, the New Jersey Division of Rate Counsel (“DRC”) recommended that the New Jersey Board of Public Utilities reject Fishermen's Energy of New Jersey LLC's proposed six-turbine wind farm to be built off the coast of Atlantic City, New Jersey.<sup>15</sup>

“The proposed ... project, and its proposed Offshore Renewable Energy Credits [ORECs] prices, do not produce a net economic benefit to New Jersey ratepayers, and, if approved and developed, could lead to a loss of nearly 30,000 jobs and a loss of \$1.0 billion in net economic output on net present value terms,” Acadian Consulting Group economist David Dismukes wrote in the testimony filed on behalf of the DRC. “The negative economic benefits, or economic harm, created by the significant rate increase created by this project, far exceed the positive economic development benefits this project could create during its construction and operational activities.”

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<sup>14</sup> *NRG puts offshore wind development on hold*; December 13, 2011; SNL Financial.

<sup>15</sup> *NJ ratepayer advocate calls for rejection of Fishermen's offshore wind farm*; February 9, 2012; SNL Financial.

In his report, Dr. Dismukes states that if the project had a “more reasonable, statistically-adjusted” installed cost of \$5,519/kW instead of \$11,237/kW, the ORECs needed to generate a 10.84% return on equity would be only \$237.45 per MWh.<sup>16</sup> The total anticipated cost of the project is approximately \$243 million. He concludes that “[t]he ... project is either (a) too expensive or (b) proposing to receive a rate of return greatly in excess of what is needed to develop an OSW [offshore wind] project along the eastern seaboard.”<sup>17</sup>

In the southern U.S., planning activity seems to be occurring in two states: Virginia and Texas. Dominion Resources Inc.’s Virginia Power subsidiary is investigating the possibility of developing offshore wind generation off the coast between Norfolk and Virginia Beach. The company recently released several studies, including one being performed by ABB, that address potential transmission infrastructure that would be needed to gather and deliver bulk power to shore from a large offshore wind farm. As part of those studies, potential transmission infrastructure costs have arisen as a concern.<sup>18</sup> In a related development, a Spanish wind company called Gamesa Energy Inc. just received approval to install a 5 MW prototype wind turbine in the lower Chesapeake Bay approximately 3 miles off the town of Cape Charles.<sup>19</sup> The project has a projected in-service date of late 2013. Beyond obtaining approval from the Virginia Marine Resources Commission, the pilot project still needs approval from the U.S. Army Corps of Engineers as well as the U.S. Coast Guard.

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<sup>16</sup> *Id.*

<sup>17</sup> *Id.*

<sup>18</sup> *Dominion study: Offshore wind generation could double retail electric rates*; March 13, 2012; SNL Financial.

<sup>19</sup> *Towering wind turbine prototype off Va. Approved*; March 27, 2012; Associated Press.

In Texas, two companies appear to be pursuing offshore wind projects. Baryonyx Corporation is developing several large-scale projects near Corpus Christi and Padre Island and recently requested a permit for the Padre Island project from the U.S. Army Corps of Engineers, which must first prepare an Environmental Impact Statement (“EIS”).<sup>20</sup> Wind Energy Systems Technology (“W.E.S.T.”) was granted several leases for offshore wind development by the Texas General Land Office and is most actively developing a project near Galveston.<sup>21</sup> The company has been collecting meteorological data for the Galveston site since mid-2007.<sup>22</sup>

Entergy’s SPO and the Companies will continue to monitor project activity along the eastern U.S. as well as in the Gulf of Mexico to better understand project economics, potential risks, and the likelihood of successfully developing offshore wind projects off the coast of Louisiana in the coming years.

### **Geothermal**

Since our prior report to the Commission in February 2010, the Companies, relying on public records and reports, have not found any significant developments regarding geothermal power in the region. The website previously maintained by Louisiana Geothermal, LLC is no longer active (<http://lageothermal.com>) and it is not clear if activity at their proposed Sweet Lake project in Cameron Parish is still on-going. To the extent further information becomes available, Entergy’s SPO and the Companies will monitor geothermal activities to better understand project economics and viability of the technology in Louisiana.

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<sup>20</sup> *Public Scoping Meeting and Preparation of Environmental Impact Statement for Baryonyx Corporation, Inc.’s Proposed Wind Farm, Offshore, Willacy and Cameron Counties, TX*; posted on the Federal Register on March 14, 2012.

<sup>21</sup> Source: <http://www.windenergypartners.biz/about.html>

<sup>22</sup> *Id.*

### **Waste Heat Recovery**

According to a 2008 report prepared for the Department of Energy, industrial manufacturing processes account for approximately 33 percent of all energy used in the U.S. However, "...as much as 20 to 50% of the energy consumed is ultimately lost via waste heat contained in streams of hot exhaust gases and liquids, as well as through heat conduction, convection, and radiation from hot equipment surfaces and from heated product streams."<sup>23</sup> According to the report, recovery of waste heat presents a potential resource assuming that three conditions can be met: 1) an accessible source of waste heat is available, 2) a recovery technology can be implemented, and 3) there is a viable and economic use for the recovered energy.<sup>24</sup> As to why waste heat recovery is not utilized to a greater extent, the report addresses five main areas where challenges arise:

- Costs – long payback periods, material constraints and costs, economies of scale favoring large projects, and operation and maintenance costs.
- Temperature Restrictions – lack of a viable end use and material constraints and costs.
- Chemical Composition – temperature restrictions, heat transfer rates, material constraints and costs streams, operation and maintenance costs, environmental concerns and product/process control.
- Application-Specific Constraints – process-specific constrains and product/process control.
- Inaccessibility/Transportability -- limited space, transportability and inaccessibility.

Based on public information, the Companies are aware of one waste heat recovery project currently under construction in Louisiana. According to a press release issued by Rain CII:<sup>25</sup>

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<sup>23</sup> *Waste Heat Recovery: Technology and Opportunities in U.S. Industry*; prepared by BCS, Incorporated; March 2008.

<sup>24</sup> *Id.*

<sup>25</sup> *Rain CII Heat Recovery Project for Power Production*; August 17, 2011; Company Press Release.



“On Wednesday, August 17, 2011 at 9:00 am, Rain CII will officially begin construction of a Heat Recovery Project at the Rain CII Sulphur, LA plant. Rain CII’s expansion will create five new direct industrial jobs while retaining 47 existing jobs. During the project, Rain CII has estimated employing 140 workers during a 14-month construction process. The project represents a \$70 million capital investment from Rain CII.”

Prior to construction, Rain CII filed a petition at the LPSC on May 25, 2010, requesting the Commission issue a determination that the project would not be considered a public utility and consequently relieving Rain CII from regulation as a public utility.<sup>26</sup> The company’s application noted that the project will have the capability of producing 36 MW.<sup>27</sup>

Given the very large existing industrial base in Louisiana, waste heat recovery presents a possible opportunity to add new renewable generating resources that do not consume fuel and can be utilized in a base load role, but also have lower overall costs and better operational characteristics than renewable technologies that are intermittent.

### **High Voltage Direct Current Transmission**

While not a renewable technology, there has been significant activity in the past two years with companies contemplating the construction of high voltage direct current (“HVDC”) transmission lines to move bulk wind power from Texas and the Midwest to other areas of the country. For example, Clean Line Energy Partners is developing four HVDC projects in the U.S. The company’s proposed Plains and Eastern Clean Line would be an 800-mile HVDC line that, if built, would connect approximately 7,000 MW of wind capacity in Texas, Oklahoma, and Kansas with power markets in Arkansas,

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<sup>26</sup> *In re: Petition for Jurisdictional Determination on Expedited Basis as to the Calcasieu Cogeneration Project*, filed May 25, 2010.

<sup>27</sup> *Id.*

Tennessee, and other states in the Southeast.<sup>28</sup> The company is currently pursuing approvals from various state regulators and federal authorities and was granted utility status by the Oklahoma Corporation Commission in October 2011.<sup>29</sup> Similarly, Pattern Energy Group LP unveiled an HVDC project in August 2010 that would carry as much as 3,000 MW of wind power from the Electric Reliability Council of Texas (“ERCOT”) region to three substations in Mississippi. The company describes the Southern Cross Project as follows:<sup>30</sup>

“...to take advantage of the lines being developed as part of the \$5 billion CREZ [Competitive Renewable Energy Zone] initiative, by feeding power from them into a proposed 345-kV switchyard in Rusk County, Texas. From there, a 345-kV line would carry the power to a high-voltage, direct-current converter station in Louisiana, where it will move across an HVDC line into Mississippi and be carried directly to TVA’s Union station, Southern Co.’s West Vernon station and Entergy’s Wolf Creek station by three separate 500-kV lines.”

As these projects continue to progress, Entergy’s SPO and the Companies will monitor activities to determine to what extent HVDC transmission lines represent a viable and economic alternative to deliver wind energy to Louisiana.

### **Current Developments**

There are two developments that are worth discussing given their direct bearing on the economic attractiveness of renewables. First, the federal Production Tax Credit (“PTC”), which provides an income tax credit of 2.2 cents/kWh for the production of electricity from wind turbines, requires that projects be in-service by the end of 2012. Congress has recently debated extending the tax credit, but has yet to take formal action. In the absence of Congress approving an extension to the federal PTC, the American

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<sup>28</sup> *Clean Line Energy works to move central US wind power to load*; March 27, 2012; SNL Financial.

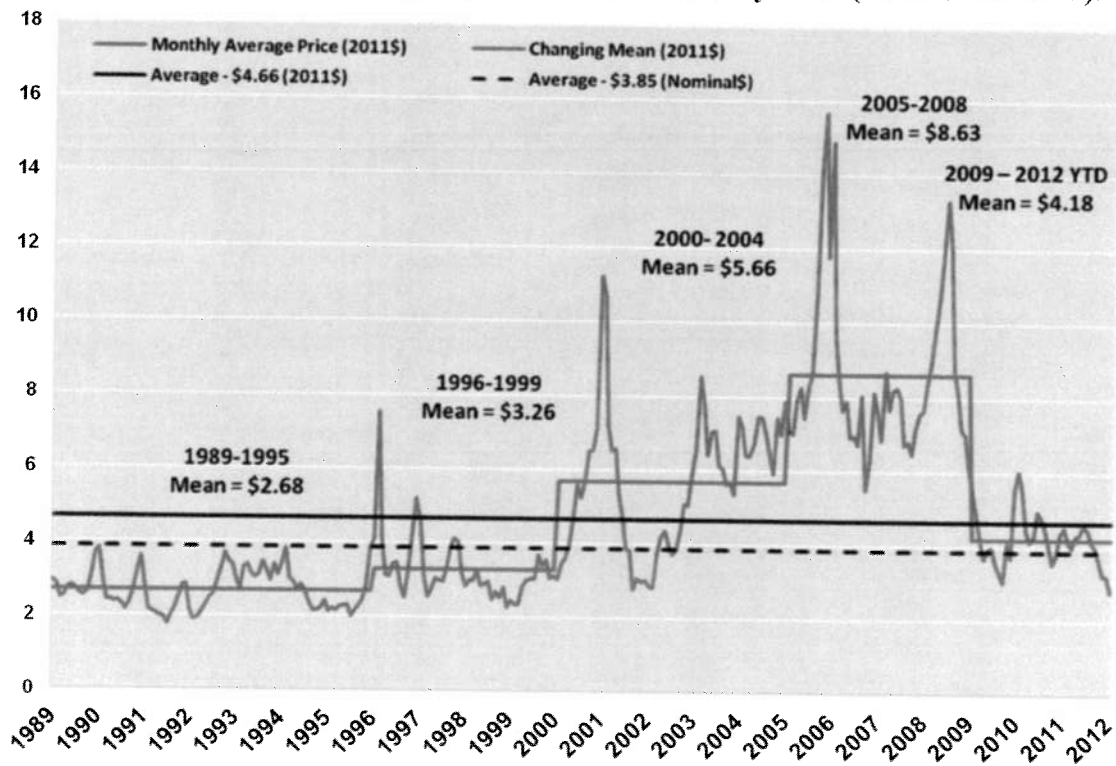
<sup>29</sup> *Id.*

<sup>30</sup> *Pattern unveils \$1B transmission proposal to carry Texas wind power to Southeast*; August 13, 2010; SNL Financial.

Wind Energy Association (“AWEA”) is predicting a substantial drop in wind investment in 2013.<sup>31</sup> In a recent article discussing Congress’ failure to extend the PTC, a wind industry consultant noted that 2013 is likely to see new wind capacity additions fall to the level installed in 2004.<sup>32</sup> In the article, he also notes that competition from cheap natural gas and anemic growth in power demand in many markets are contributing factors.

The other current development is the continuing low price of natural gas, especially coming out of a warmer than normal winter with record gas in storage. The following chart shows the trend in natural gas prices since 1989.

**Chart 2. Historic Henry Hub Prices, 1989 – January 2012 ( 2011 \$/ MMBtu).**



<sup>31</sup> Source: <http://awea.org>.

<sup>32</sup> *Congress deals major blow to wind power industry*; February 16, 2012; Chicago Tribune.


Recent natural gas prices have migrated closer to historic averages, a change that can be attributed to lackluster economic growth, but more importantly to the emergence of shale gas including liquid-rich shale areas. As natural gas prices have declined over the past few years with current near-term forward prices in the low \$2 per MMBTU range, many industry observers have commented on the growing challenge of renewable resources, particularly higher cost technologies, competing with lower cost conventional resources. As the natural gas market evolves (*e.g.*, a potential growth in large-scale export of liquefied natural gas) and more information becomes available about renewable technologies including their viability and potential economics, it will be important to consider the balance between the costs and operational characteristics of renewable resources versus conventional resources.

**Other Information**

Highly Sensitive Protected Materials Exhibits 3 and 4 contain additional information that may be of interest to Staff.

Respectfully submitted,

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ENERGY GULF STATES  
LOUISIANA, INC.**

**BEFORE THE**

**LOUISIANA PUBLIC SERVICE COMMISSION**

**LOUISIANA PUBLIC SERVICE )  
COMMISSION EXPARTE )**

**IN RE: RE-STUDY OF THE )  
FEASIBILITY OF A RENEWABLE )  
PORTFOLIO STANDARD FOR THE )  
STATE OF LOUISIANA )**

**DOCKET NO. R-28271  
(Subdocket B)**

**EXHIBIT 1**

**HIGHLY SENSITIVE PROTECTED MATERIAL**

**INFORMATION INTENTIONALLY OMITTED**

**MARCH 2012**

**BEFORE THE**

**LOUISIANA PUBLIC SERVICE COMMISSION**

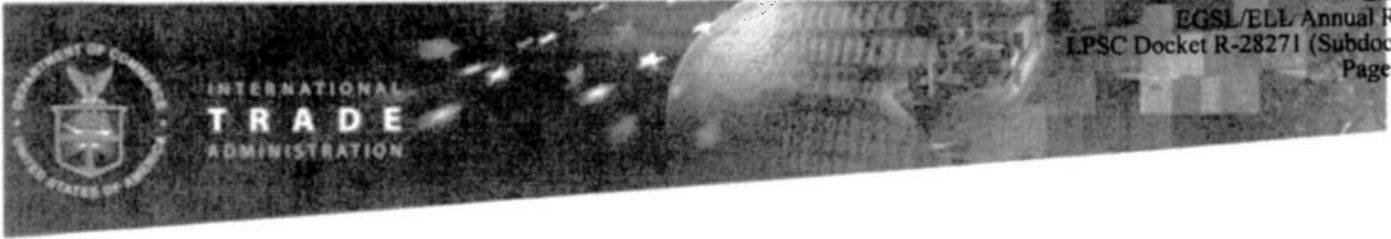
**LOUISIANA PUBLIC SERVICE )  
COMMISSION EXPARTE )**

**IN RE: RE-STUDY OF THE )  
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STATE OF LOUISIANA )**

**DOCKET NO. R-28271  
(Subdocket B)**

**EXHIBIT 2**

**MARCH 2012**



## FACT SHEET

### Commerce Preliminarily Finds Countervailable Subsidization of Crystalline Silicon Photovoltaic Cells, Whether or Not Assembled into Modules from the People's Republic of China

- On March 20, 2012, the Department of Commerce (Commerce) announced its affirmative preliminary determination in the countervailing duty (CVD) investigation of imports of crystalline silicon photovoltaic cells, whether or not assembled into modules (solar cells) from the People's Republic of China (China).
- For the purpose of CVD investigations, countervailable subsidies are financial assistance from foreign governments that benefit the production of goods from foreign companies and are limited to specific enterprises or industries, or are contingent either upon export performance or upon the use of domestic goods over imported goods.
- Commerce preliminarily determined that Chinese producers/exporters have received countervailable subsidies ranging from 2.90 to 4.73 percent.
- Mandatory respondent, Wuxi Suntech Power Co., Ltd., received a preliminary subsidy rate of 2.90 percent. Mandatory respondent, Changzhou Trina Solar Energy Co., Ltd., received a preliminary subsidy rate of 4.73 percent.
- All other Chinese producers/exporters received a preliminary subsidy rate of 3.61 percent.
- In an earlier decision on January 27, 2012, Commerce preliminarily determined that critical circumstances exist in the CVD investigation.
- As a result of this preliminary determination, Commerce will instruct U.S. Customs and Border Protection to collect a cash deposit or bond based on these preliminary rates, applicable to all entries of Chinese solar cells made up to 90 days prior to the preliminary determination.
- The preliminary determination in the companion antidumping duty (AD) investigation on solar cells from China is scheduled to be announced on May 17, 2012.
- On March 20, 2012, Commerce also announced a clarification of the scope of the ongoing AD and CVD investigations, finding that the scope covers not only imports of solar cells produced in China and solar modules/panels produced in China from Chinese-made solar cells, but also imports of solar modules/panels produced outside of China from solar cells produced in China. Commerce also found that the scope does not cover imports of modules/panels produced in China from solar cells produced in a third country. Changes in the scope are indicated in bold, below. As with all issues on the record, interested parties are welcome to comment on the scope clarification in their case briefs.
- The petitioner for this investigation is SolarWorld Industries America Inc. (OR).
- The products covered by this investigation are crystalline silicon photovoltaic cells, and modules, laminates, and panels, consisting of crystalline silicon photovoltaic cells, whether or not partially or

fully assembled into other products, including, but not limited to, modules, laminates, panels and building integrated materials.

- This investigation covers crystalline silicon photovoltaic cells of thickness equal to or greater than 20 micrometers, having a p/n junction formed by any means, whether or not the cell has undergone other processing, including, but not limited to, cleaning, etching, coating, and/or addition of materials (including, but not limited to, metallization and conductor patterns) to collect and forward the electricity that is generated by the cell.
- Subject merchandise may be described at the time of importation as parts for final finished products that are assembled after importation, including, but not limited to, modules, laminates, panels, building-integrated modules, building-integrated panels, or other finished goods kits. Such parts that otherwise meet the definition of subject merchandise are included in the scope of this investigation.
- Excluded from the scope of this investigation are thin film photovoltaic products produced from amorphous silicon (a-Si), cadmium telluride (CdTe), or copper indium gallium selenide (CIGS).
- Also excluded from the scope of this investigation are crystalline silicon photovoltaic cells, not exceeding 10,000mm<sup>2</sup> in surface area, that are permanently integrated into a consumer good whose function is other than power generation and that consumes the electricity generated by the integrated crystalline silicon photovoltaic cell. Where more than one cell is permanently integrated into a consumer good, the surface area for purposes of this exclusion shall be the total combined surface area of all cells that are integrated into the consumer good.
- **Modules, laminates, and panels produced in a third-country from cells produced in the PRC are covered by this investigation; however, modules, laminates, and panels produced in the PRC from cells produced in a third-country are not covered by this investigation.**
- Merchandise covered by this investigation is currently classified in the Harmonized Tariff System of the United States (HTSUS) under subheadings 8501.61.0000, 8507.20.80, 8541.40.6020 and 8541.40.6030. These HTSUS subheadings are provided for convenience and customs purposes; the written description of the scope of these investigations is dispositive.
- In 2011, imports of solar cells from China were valued at an estimated \$3.1 billion. However, the solar cells subject to this investigation are classified within HTSUS basket categories that contain products beyond the scope of the investigation.

#### NEXT STEPS

- Commerce is currently scheduled to make its final determination in June 2012.
- If Commerce makes an affirmative final determination, and the U.S. International Trade Commission (ITC) makes an affirmative final determination that imports of solar cells from China materially injure, or threaten material injury to, the domestic industry, Commerce will issue a CVD order. The ITC is scheduled to make its final injury determination in July 19, 2012.



**Preliminary Subsidy Rates:**

<b>PRODUCER/EXPORTER</b>	<b>SUBSIDY RATE</b>
Wuxi Suntech Power Co., Ltd.	2.90 %
Changzhou Trina Solar Energy Co., Ltd.	4.73 %
All Others	3.61 %

**CASE CALENDAR<sup>1</sup>:**

<b>EVENT</b>	<b>CVD INVESTIGATION</b>
Petition Filed	October 19, 2011
DOC Initiation Date	November 8, 2011
ITC Preliminary Determination	December 5, 2011
DOC Preliminary Determination	March 19, 2011
DOC Final Determination*	June 4, 2012
ITC Final Determination**	July 19, 2012
Issuance of Order***	July 26, 2012

\*This deadline may be extended under the governing statute.

\*\*This will take place only in the event of a final affirmative determination from Commerce.

\*\*\*This will take place only in the event of final affirmative determinations from Commerce and the ITC.

**IMPORT STATISTICS:**

<b>CHINA</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Quantity (No.)	26,876,000	46,084,000	93,292,000
Value (US\$)	639,528,000	1,506,329,000	3,117,369,000

Source: U.S. Bureau of Census, accessed through Global Trade Atlas. (HTSUS 8501.61.0000, 8507.20.80, 8541.40.6020, 8541.40.6030). Some HTSUS subheadings include basket categories and may cover both subject and non-subject merchandise.

<sup>1</sup> For a CVD investigation, the deadline is set forth in section 705(a)(1) of the Tariff Act of 1930, as amended (the Act)

**BEFORE THE**

**LOUISIANA PUBLIC SERVICE COMMISSION**

**LOUISIANA PUBLIC SERVICE )  
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**IN RE: RE-STUDY OF THE )  
FEASIBILITY OF A RENEWABLE )  
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STATE OF LOUISIANA )**

**DOCKET NO. R-28271  
(Subdocket B)**

**EXHIBIT 3**

**HIGHLY SENSITIVE PROTECTED MATERIAL**

**INFORMATION INTENTIONALLY OMITTED**

**MARCH 2012**

**BEFORE THE**

**LOUISIANA PUBLIC SERVICE COMMISSION**

**LOUISIANA PUBLIC SERVICE )  
COMMISSION EXPARTE )**

**IN RE: RE-STUDY OF THE )  
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STATE OF LOUISIANA )**

**DOCKET NO. R-28271  
(Subdocket B)**

**EXHIBIT 4**

**HIGHLY SENSITIVE PROTECTED MATERIAL**

**INFORMATION INTENTIONALLY OMITTED**

**MARCH 2012**

## CERTIFICATE OF SERVICE

I, the undersigned counsel, hereby certify that a copy of the above and foregoing has been served on the persons listed below by facsimile, electronic mail, hand delivery and/or by mailing said copy through the United States Postal Service, postage prepaid, and addressed as follows:

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