

WEEKLY GLOBAL ENERGY Markets SNAPSHOT

September 1 – September 5, 2014



News you missed during the week…

St Vincent Geothermal Power Plant Could Be Operational By 2018

St. Vincent and the Grenadines Prime Minister, Dr. Ralph Gonsalves, updating the country on the results of the surface exploration phase of the geothermal project stating that a recent report indicated Mount Soufriere is hosting a high temporary geothermal reservoir of commercial use. Gonsalves further mentioned that if everything "goes well and on scheduled", the geothermal plant is scheduled to begin operations in June 2018. St. Vincent and the Grenadines current peak demand for electricity is 20MW with 5MW generated by hydropower. The government is exploring the development of a 5 to 15 MW geothermal power plant to provide base load power to the country.

(Source: http://www.caribbean360.com/news/st-vincent-geothermal-power-plant-could-be-operational-by-2018)

SIDS Leaders Take Responsibility for Renewable Energy and Energy Efficiency Development

Over 150 delegates and members of the international development community from more than 45 countries were stunned to see leader after leader approach the podium to sign a historic sustainable energy and climate resilient treaty that will significantly change the lives of over 20 million small islanders. Multiple leaders from the Pacific, Caribbean and African, Indian Ocean and Mediterranean Sea (AIMS) regions, forcefully raised their voices in unison and accepted responsibility for fulfilling the commitment to the Small Island Developing States (SIDS) Sustainable Energy mechanism – SIDS DOCK. The opening for signature of this historic SIDS DOCK Treaty was a major highlight of the first day of the United Nations (UN) Third International Conference on SIDS, taking place in Apia, Samoa, from 1-4 September, 2014.

(Source: https://www.sprep.org/climate-change)



IAEA Experts to Visit Japan for Fukushima Seawater Sampling

IAEA experts will visit Japan from 8 to 14 September 2014 to collect water samples from the sea near TEPCO's Fukushima Daiichi Nuclear Power Station, in an exercise to support high-quality gathering and analysis of

radioactivity data by the responsible authorities in Japan. The visit by the experts is the first follow-up activity to the advisory points on marine monitoring included in a report by the IAEA International Peer Review Mission on Mid- and Long-Term Roadmap Towards the Decommissioning of TEPCO's Fukushima Daiichi Nuclear Power Station Units 1-4, which in late 2013 reviewed Japan's efforts to plan and implement the decommissioning of the plant.
(Source: http://www.iaea.org/newscenter/pressreleases/*)*



Tesla to Choose Nevada for Battery Factory

Electric vehicle and battery storage technology company Tesla Motors has selected Nevada as the site for its much-hyped Gigafactory. The Gigafactory will be sited near Reno, Nevada, which is close to the company's vehicle assembly plant in Fremont, California. When it reaches full capacity, the Gigafactory plant will produce 35 gigawatt-hours of lithium ion cells per year — more than the existing capacity of all batteries worldwide today. If all goes according to Elon Musk's plans, the Gigafactory would not only produce battery packs to bring 500,000 Tesla vehicles on the road by 2020, but bring down the costs of battery storage, a technology considered vital to the integration of high penetrations of intermittent renewables, by at least 30% through its sheer scale and vertical integration.
(Source: http://online.wsj.com/articles/tesla-to-choose-nevada-for-battery-factory-1409773118*)*



Apple's New Headquarters Will Be Self-Sufficient For Power

Apple's new headquarters, now being built, will be one of the most impressive offices in the world when completed in 2016, at which time it will be home to 13,000 Apple employees. The Spaceship, as it is known, will have a glass-walled circular structure which will be a mile in circumference, at the centre of a 175-acre campus that includes a man-made forest of 7,000 trees. Those glass walls will slide open and natural gas will, primarily, provide the building's power and the local energy grid will only be accessed in emergencies. The glass structure will also be fitted with solar panels. Power needs will be kept low by energy-saving LED lights and natural ventilation that will do away with the need for air conditioning up to 70% of the year.
(Source: http://www.smartgridnews.com/artman/publish/Business_Strategy/*)*



WEEKLY GLOBAL ENERGY Markets SNAPSHOT

September 8 – September 12, 2014



News you missed during the week…

Barbados to Benefit From Chinese Donation of LED Lights, Air-Conditioning Units

Barbados has signed a Memorandum of Understanding (MOU) with the People's Republic of China resulting in the donation of 25,000 LED lights and 1000 air-conditioning units to support the island's climate change efforts. A government statement said that electricity accounted for a significant percentage of government's operating costs estimated at more than BDS$100 million (One BDS dollar =US$0.50 cents) annually. The relevant ministry mentioned that lighting and air-conditioning accounted for the majority of electricity usage and costs. In an effort to reduce these recurring expenses, government intended to retrofit 75 state-owned buildings with energy efficiency lighting. It is also planned to replace aging and inefficient air-conditioning units which have been identified through energy audits.

(Source: http://www.caribbean360.com/news/barbados-to-benfit-from-chinese-donation-of-led-lights-air-conditioning-units*)*



Iberdrola Modernizes 45 Small Hydro Projects in Spain

Spanish utility Iberdrola reported this week that it has modernized 45 of its 92 small hydropower projects in Spain over the last three years. The utility and international renewable energy producer said it invested about 10 million euros (US$13 million) on renovating its oldest small hydropower plants, installing the most efficient and advanced technology to improve output and extend their lifespan. Iberdrola has small hydro plants in Spain totalling 306 MW.

(Source: http://www.hydroworld.com/articles/2014/09/iberdrola-modernizes-45-small-hydro-projects-in-spain.html*)*



Scottish Independence and the English and Welsh Energy Bills

Scottish independence could lead to cheaper energy bills for consumers in England and Wales, senior industry sources have told the BBC. The UK government claims independence would see Scottish bills soar to pay for renewable energy projects. The SNP rejects this and has promised a 5% cut in bills if Scotland votes Yes. Energy industry sources say it all depends on how subsidies for

Scottish wind and tidal projects - currently shared across the UK - are divided up. If there is a Yes vote next Thursday, the industry expects the subsidies to carry on until the negotiations on independence are finalised in early 2016. SNP estimate that it will cut energy bills by around 5% - or £70 a year.

(Source: http://www.bbc.com/news/uk-politics-29142390*)*



Fuel Cell Maker Bloom Energy Sets Sights on Big Power Users

Fuel cell power is more expensive than generation from traditional turbines, may not be economical without subsidies, requires some creative thinking to be considered "renewable" and remains questionable from an emissions standpoint. But companies are desperate for reliable power and fuel cells are becoming an important part of the distributed generation equation. Bloom, one of the biggest — and most ambitious — players in the fuel cell space, continues to maintain the buzz surrounding its hyped Bloom Box technology and recently partnered with Exelon, one of the biggest utilities in the US.

(Source: http://www.utilitydive.com/news/facing-questions-fuel-cell-maker-bloom-energy-sets-sights-on-big-power-use/302423/*)*



Eurasia To Spend Billions On Smart Grid Work Over The Next Decade

Eurasian countries will invest $18.3 billion in electric grid modernization over the next decade, according to a new study published by Northeast Group. The report says the region has strong drivers for smart grid investment, a number of experienced vendors and significant funding available from multilateral lending organizations. The report notes that near-term growth will be focused in Central Asian countries currently battling high electricity losses. Larger countries, such as Russia, are expected to develop in the medium term.

(Source: http://www.renew-grid.com/e107_plugins/content/content.php?content.11263*)*



WEEKLY GLOBAL ENERGY Markets SNAPSHOT

September 15 – September 19, 2014



News you missed during the week…

Jamaica Signs 3 PPAs to Boost Generating Capacity

During a ceremony in Kingston, three companies focused on wind and solar energy signed power purchase agreements (PPAs) worth roughly $200 million with Jamaica's sole electricity distributor and also received licenses from the government. The two planned wind installations (by Blue Mountain Renewables LLC and Wigton Wind Farm) along with one solar energy project (by WRB Enterprises Inc) are expected to add 80 megawatts of electricity to the Caribbean island's grid. Jamaica's utility regulator mentioned that the country would derive 11% of its power from renewable sources when the projects come on line in 2016. Renewables make up about 6 percent now.

(Source: http://www.foxbusiness.com/markets/2014/09/18/jamaica-signs-3-power-purchase-agreements-to-boost-generating-capacity-from/)

Duke Energy to Invest $500M in Solar



Duke Energy announced this week it is committing $500 million to solar energy in North Carolina. As part of the commitment, Duke said it will buy three utility-scale solar projects totalling 128 megawatts of capacity. Duke also states it has also signed five power purchasing agreements (PPAs) with solar developers totalling 150 megawatts of capacity.

(Source: http://www.newsobserver.com/2014/09/15/4153330_duke-energy-to-spend-500-million.html?rh=1)



Siemens Starts New Energy Transition Research Project in Germany

Siemens has started a new project – IREN2 (Future Viable Networks for *Integration of Renewable Energy systems*) – in Wildpoldsried in the Allgäu region in connection with Germany's transition to a new energy mix. Siemens is working on this project as part of a consortium with four other companies. The project will investigate innovative power grid structures and their operational management based on technical and economic criteria. The goal is to discover how energy systems with distributed power generation and additional components like battery storage devices, block district heating power plants, biogas plants, and diesel generators can

be technically and economically optimized. Over the project period of three years, the research consortium also plans to test microgrids.

(Source: http://goo.gl/GoUCjo)



Exxon's $700 Million Russian Arctic Oil Well Hangs On Sanctions

Exxon Mobil Corp.'s work on a $700 million Arctic well in Russia could be stopped before it's finished under new U.S. and European Union sanctions that outlaw the drilling partnership. New sanctions ban U.S. and EU companies from working with Russian officials or companies to find or produce crude from deep seas, shale fields or the Arctic. The decrees, reported earlier this week by Bloomberg, were imposed Sept. 12, the 35th day of drilling off Russia's northern coast that was scheduled to last for 70 days. American and European explorers such as Exxon and Royal Dutch Shell Plc, which is drilling in Siberian shale rock formations, will have to act fast to avoid violating the bans, said an international lawyer. U.S. companies have until Sept. 26 to shut down sanctioned operations with Russian partners, according to the new rules.

(Source: http://www.worldoil.com/Exxons-700-million-Russian-Arctic-oil-well-hangs-on-sanctions.html)

Brazil Sets Concession Auction for 8,040-MW Hydro Project



Brazil's mines and energy ministry has published guidelines for the concession auction to develop the 8,040-MW Sao Luiz do Tapajos hydroelectric project on Brazil's Tapajos River. The Ministerio de Minas e Energia scheduled the auction for December 15 at which time companies will compete for rights to build Sao Luiz do Tapajos and sell at least 70 to 80 percent of its power to electricity distributors in the regulated power market. Provisions for the auction, published in Brazil's official Diario Oficial da Uniao, call for the project to begin operation in December 2019. It is to provide power under contracts running from July 2020 through December 2049.

(Source: http://www.renewableenergyworld.com/rea/news/article/2014/09/brazil-sets-concession-auction-for-8040-mw-sao-luiz-do-tapajos-hydro-project)



WEEKLY GLOBAL ENERGY Markets SNAPSHOT

September 22 – September 26, 2014



News you missed during the week…

Caribbean Biggest Solar PV Power Project to be Built in Jamaica

The American company WRB Content Solar has entered into a solar PV power plant construction agreement with Jamaica. Under the terms of the agreement, the company will build a 20MW of solar PV power project with a total investment of about $60 million and 98,000 pieces of PV panels will be installed. The PV project which will be started in October 2014 and completed in September 2015 will create 30 to 60 jobs during one-year construction period. The operating period for WRB will be 20 years. Once completed, it can power up 20,000 households, equivalently saving 8.5 million gallons of imported fuel annually.

(Source: http://www.cipore.org/caribbean-biggest-solar-pv-power-project-to-be-built-in-jamaica/)

Solar Plane to Start Global Flight, End in Abu Dhabi



It was announced this week that a Swiss-made solar-powered aircraft is planned to start and finish its first round-the-world flight from the United Arab Emirates capital of Abu Dhabi. The choice of Abu Dhabi as the launch site for the historic journey is likely to bolster the wealthy emirate's efforts to position itself as a champion of renewable energy. It controls the bulk of the vast petroleum reserves in the Emirates, a seven-state federation that ranks among the largest oil exporters in OPEC. Project founders Bertrand Piccard and Andre Borschberg hope to complete the journey over four or five months, including stopovers in Asia, North America and either Europe or North Africa.

(Source: http://www.jamaicaobserver.com/business/Solar-plane-to-start-global-flight--end-in-Abu-Dhabi_17610991)



Hungary Suspends Gas Supplies to Ukraine

Hungary's gas pipeline operator, FGSZ, says it has suspended delivery of gas to neighbouring Ukraine "indefinitely". Ukraine has been receiving gas from Hungary, Poland and Slovakia since Russia cut off supplies to Ukraine in June in a dispute over unpaid bills. Ukrainian state gas firm Naftogaz confirmed the stoppage, saying it was "unexpected and unexplained".

(Source: http://www.bbc.com/news/business-29374151)



SoCal Edison Unveils Largest Battery Storage System In U.S.

During the week, Southern California Edison (SCE) unveiled its new 8 megawatt, 32 megawatt-hour lithium ion battery storage system. It is the biggest battery project in North America and one of the biggest in the world. The utility will use the project to begin testing the costs and impacts of battery storage in conjunction with variable generation. The battery system is located in California's Tehachapi Mountains, where 4.5 gigawatts of installed wind capacity, much of it already in service, are expected to be generating by the end of 2016.

(Source: http://www.greentechmedia.com/articles/read/The-Biggest-Battery-in-North-America-Gets-Unveiled-By-SCE-Today)

Rockefellers To Switch Investments To 'Clean Energy'



Heirs to the Rockefeller family, which made its vast fortune from oil, are to sell investments in fossil fuels and reinvest in clean energy, reports say. The Rockefeller Brothers Fund is joining a coalition of philanthropists pledging to rid themselves of more than $50bn in fossil fuel assets. Some 650 individuals and 180 institutions have joined the coalition. It is part of a growing global initiative called Global Divest-Invest, which began on university campuses several years ago, the New York Times reports. Pledges from pension funds, religious groups and big universities have reportedly doubled since the start of 2014.

(Source: http://www.bbc.com/news/world-us-canada-29310475)



WEEKLY GLOBAL ENERGY Markets SNAPSHOT

September 29 – October 3, 2014



News you missed during the week…

OECS Ministers Talk Environmental Sustainability in Tortola

Environment Ministers from across the Organization of Eastern Caribbean States (OECS) are meeting this week in Tortola to discuss environmental sustainability. The summit is the first-ever meeting of its kind since the Revised Treaty of Basseterre came into force in 2011. British Virgin Islands Premier Dr Orlando Smith made a high-profile address at the conference, joined by Virgin Islands Governor John Duncan. Meetings were also preceded by an exhibition on climate change. On this week's agenda are issues including ocean governance, energy and climate change along with relevant policy issues related to natural disasters, and Small Island Developing States.

(Source: http://ceebip.org/eastern-caribbean-ministers-talk-environmental-sustainability-in-tortola/*)*

Asia Gets Pick of Oil as Shale Boom Captures U.S. Market



Reports mentioned this week that Asia is getting a greater choice of crude from Alaska North Slope to Venezuela's Carabobo and Iraqi Basrah-Light as the U.S. shale boom cuts American demand for overseas oil. Crude from around the world is competing for buyers in Asia, says the International Energy Agency (IEA). South Korea is taking the first Alaskan export cargo since 2004, Japanese traders are purchasing U.S. shipments of ultra-light oil from the Gulf of Mexico and India is buying more Latin American output. IEA also reported that Asia will account for more than 50% of global demand growth in 2014. The U.S. shale revolution is changing the flow of oil and challenging the influence of traditional suppliers.

(Source: http://www.bloomberg.com/news/2014-10-02/oil-market-wooing-asian-traders-with-champagne-discounts.html)



New York To Spend $23 Million for Solar Panels on 24 Schools

New York City will spend $23 million to install solar-paneled roofs on 24 public schools, its Mayor said this week. The installations will triple the amount of solar power currently gathered on city-owned buildings and the total investment will be about $28 million, with $5 million coming

from state grants under the NY-Sun Initiative. The Mayor has a goal of developing 100 MW of solar power on public buildings and 250 MW on private properties in 10 years.

(Source: http://www.renewableenergyworld.com/rea/news/article/2014/09/new-york-to-spend-23-million-for-solar-panels-on-24-schools)



Solar Energy Could Be The Largest Source of Electricity By 2050

The sun could be the world's largest source of electricity by 2050, ahead of fossil fuels, wind, hydro and nuclear, according to a pair of reports issued by the International Energy Agency (IEA), the "Technology Roadmap: Solar Photovoltaic Energy" and the "Technology Roadmap: Solar Thermal Electricity". The two IEA technology roadmaps show how solar photovoltaic (PV) systems could generate up to 16% of the world's electricity by 2050 while solar thermal electricity (STE) from concentrating solar power (CSP) plants could provide an additional 11%. Combined, these solar technologies could prevent the emission of more than 6 billion tonnes of carbon dioxide per year by 2050.

(Source: http://www.solarexpo.com/eng/news/news/IEA-Solar-energy-could-be-the-largest-source-of-electricity-by-2050/)

Kazakhstan Removes Stockpile of Fresh High Enriched Uranium



Kazakhstan has removed a stockpile of Russian-origin fresh high enriched uranium (HEU) fuel from the critical assembly of the WWR-K Research Reactor in Almaty. The WWR-K is a tank-type, light water moderated and cooled multipurpose research reactor with a nominal power of 6 MW(e).The fresh HEU, representing 10.2 kilograms of uranium mass, was sent to a secure storage facility in Russia this week. The HEU removal operation was managed by the IAEA, the Russian Federation, the United States and Kazakhstan, under the Global Threat Reduction Initiative (GTRI).

(Source: http://goo.gl/kGfswu)