
REPORTS FROM THE GRID'S EDGE

THE STATEN NEWSLETTER

GRID DEFECTION

One Small Step for the US, One Giant Step for California. Last week the California Energy Commission voted unanimously to make solar systems mandatory on all new homes beginning Jan 1, 2020. In 18 months...

The Building Code already required all new homes built after 2014 to be solar ready. The new measure tacitly sanctions a major segment of customers primed for grid defection, customers who will generate their own electricity and stop buying from the utility. And by instantly creating a massive solar market (California is now the fifth largest economy in the world, and the largest residential market in the US), the measure will drive down prices for every component of the market (modules, equipment, installation, infrastructure) and force a massive restructuring of the electricity markets.



Source: californias-solar-mandate-the-first-of-its-kind-in-the-us-will-hasten-defection-day-from-the-grid/

INSIDE

Staten's Birthday

An intercontinental affair. Confounding CFO's better judgment, celebration goes on for days...

Gigantism Rising

Solar projects of enormous proportions reveal extent of energy transition underway.

Blockchain

Peer to peer trading is part of the future away from the grid.

GRID DEFECTION

CONTINUED.

The more progressive commercial and industrial customers are already moving to the grid's edge with onsite and offsite solar as much as they are allowed to. Those lucky enough to have been grandfathered into the Direct Access program, which was closed to new registrants in 2001 (with a Limited Re-Opening window that closed in 2010), can purchase their power from non utility service providers. The others are finding new ways to escape the inefficient and unjustifiable rates imposed by the regulated monopolies, who love solar so long as they own it, but hyperventilate at the idea of customers owning their own and selling their excess power back to the grid.

Storage now provides opportunities to realize greater savings through "partial-defection". In other words, the California Energy Commission measure will affect the regulated monopolies' business models and regulatory decisions faster.

A McKenzie report estimates that full grid defection will be common by 2028.

"The only way to pay for the grid is as a network," an interconnected set of transmission and storage assets, said McKinsey's David Frankel, a co-author of the report. **"It's very counter to what the industry has seen."**

Source: [battery-storage-the-next-disruptive-technology-in-the-power-sector](#)

Distributed Energy Resources (DER) companies, solar firms, technology manufacturers, and finance players have been given a mandate to devise combinations of storage and solar that delivers customer value and lower rates.

Some companies are launching new products and services to manage the increased complexity raised by the demand for distributed energy. Solaredge's new monitoring platform for commercial behind the meter systems is a good example.

Companies who invest in software and advanced analytics to manage circuit-by-circuit nodal planning and health assessments that react in milliseconds with the grid will be the new stars.

Storage addresses individual load profile data in ways solar alone cannot. This favors tailored solutions and the development of algorithms that find the best value at the best time. Straight into the lap of Silicon Valley programmers...



BLOCKCHAIN, BLOCKCHAIN, BLOCKCHAIN.

The energy industry is in dizzying transition from fossil fuels to renewables, from centralized distribution to onsite production, from dependence to independence, from grid edge to individual trading.

With smart storage, batteries with sophisticated software that communicate with the grid thousands of times per second, the market is moving toward to a model where everyone will produce, store and sell their own energy.

Blockchains, the software platforms on which cryptocurrencies are built, but also capable of smart contracts, are used by startups developing transactive energy applications for residential and industrial customers for peer to peer trading. Drift, LO3, Grid+ and Energy Web Foundation (EWF) co founded by the Rocky Mountain Institute, are examples of some of the startups already competing in the US.

Top public market deal 2017, Blockchain Power Trust, TSX Venture Exchange: \$35M

Source: BNEF Clean Energy Investment Trends 1Q 2018



GIGANTISM RISING

In revealing trends toward a fossil fuel free future, Saudi Arabia signed an MOU with Japan's Softbank for a 200GW solar park to be completed by 2030. France's EDF announced it would develop 30 GW of storage by 2035. In Africa, EDF aims to acquire 1.2 million storage customers by 2035 through partnerships. India has committed to installing 100 GW of solar by 2022.

Saudi Arabia's long term plan is to capitalize its desert land and export clean energy to Europe.

Benchmark costs have fallen 18% in the first half of 2018 over a year ago according to Bloomberg New Energy Finance (BNEF).

STATEN TURNS 10!

Staten celebrates its tenth birthday in May with parties in Silicon Valley and New Delhi...

Double digits! Surviving the fog of youth and the chaos of a disruptive industry on two continents. Reason to celebrate indeed.

The international profile of the company is becoming more pronounced as its growth needs are met with talent originating from multiple continents across multiple cultures. In the past nine months, Staten has hired professionals fluent in Vietnamese, Spanish, Punjabi and Bantu Swahili.



The guiding principle that fuels its mission: **good energy in, good energy out.**
It comes naturally to the Staten tribe.



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