



Full Text of Paris COP21 Climate Change Agreement

This is the final, official and complete text of the Paris Climate Change Summit (COP21).



Smart Grid To Be Controlled By AI

TN Note: The first two hard requirements for Technocracy recorded in 1934 concerned establishment of Smart Grid:

- *“Register on a continuous 24 hour-per-day basis the total net conversion of energy.*
- *“By means of the registration of energy converted and consumed, make possible a balanced load.”*

The “make possible a balanced load” is now being achieved by artificial intelligence.

As more renewable energy sources come online, energy storage has grown in importance, especially when the sun sets each day and the wind stops blowing. Predictive analytics and control software are now being applied to the problem of energy storage as a way to monitor and control demand spikes and connect storage systems to the emerging smart grid.

The latest example comes from AutoGrid Systems Calif., the developer of an “energy data platform” that uses smart meter, sensor and other utility data to generate a real-time assessment of energy consumption and recommendations for efficient power distribution. AutoGrid, Redwood City, Calif., announced on Monday (Dec. 14) that energy storage specialist Electro Power Systems (EPS) would use its predictive control system to build and operate “software-defined power plants.”

The predictive control technology is intended to help EPS customers forecast energy demand and optimize energy storage and distribution systems for variable sources like solar and “combined heat and power plants.” The resulting software-defined power plants based on AutoGrid analytics algorithms are designed to aggregate energy storage and distribution resources. The combined resources can then be used for grid applications like managing demand response or determining how much renewable energy can be traded on the broader electricity market, the partners said.

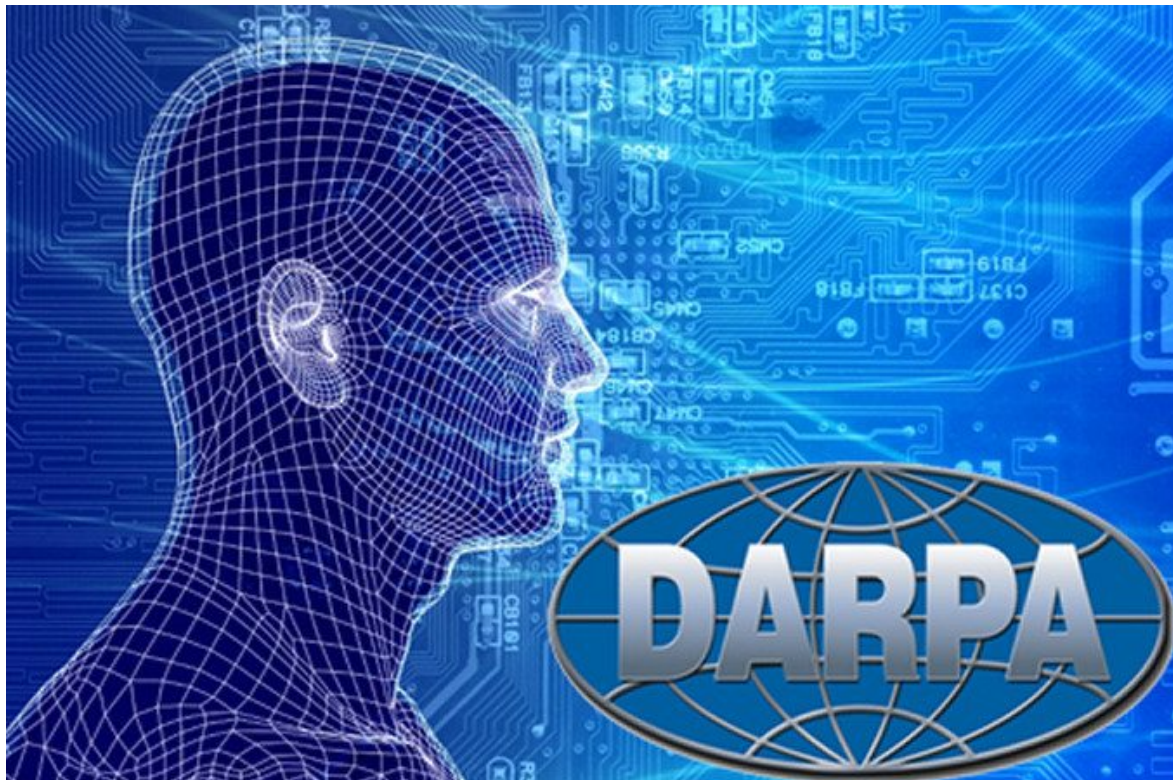
Paris-based EPS, which specializes in hydrogen storage systems, said the partnership with AutoGrid would help accelerate deployment of energy storage technology on the emerging smart grid. The energy company will leverage the analytics and control software to “reduce demand charges and participate in utility grid flexibility programs and electricity markets,” EPS CEO Carlalberto Guglielminotti said in a statement.

The ability to lower energy demand charges through tools like predictive analytics is increasingly seen as another way to reduce energy costs. The partners noted that fluctuating energy demand represents a majority of the electricity bill for commercial and industrial customers. For example, demand for energy during peak periods of the day accounts for an estimated 70 percent of the electricity bill for commercial customers in California.

Despite the growth of renewable energy sources like solar and wind, the variability of these energy sources makes energy storage more critical since it can be released when the sun goes down and when peak demand rises.

AutoGrid said accurate energy demand forecasts require capturing and predicting, for example, data on the interaction between solar output and building energy loads. The software-defined power plant approach is designed to capture data on actual peaks in demand. That data can then be used to avoid unnecessary discharge cycles in storage systems that extend their lifetime by reducing the number of times they need to be recharged.

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DARPA Already Creating Cybersoldiers Using Advanced AI Technology

TN Note: DARPA (Defense Advanced Research Projects Agency) is a hotbed of technocrats who advance technology for military and national

security purposes. In other words, it's first mission is to perpetuate and reinforce the same government that is transforming America into a global state. Technocrats create technology for technology's sake, exclusive of moral or ethical constraints. Note that the current Secretary of Defense is Ashton Carter, a career technocrat with a PhD in Theoretical Physics and a member of the elitist Trilateral Commission.

The US military has revealed its plans for artificial intelligence on the battlefield - but admits enemies are already ahead of it.

It hopes AI will power everything from cybersoldiers to the targetting systems of the F-35 - but admits it has to catch up to commercial AI firms.

Deputy Defense secretary Robert Work said 'The commercial world has already made this leap.'

Speaking at a national security forum co-hosted by the Center for a New American Security and Defense One, he admitted 'The Department of Defense is a follower.'

He also said cyber battles would rely on AI.

'You cannot have a human operator operating at human speed fighting back at determined cyber tech,' Work said.

'You are going to need have a learning machine that does that.'

He also admitting automating weapons could happen.

'We believe strongly that humans should be the only ones to decide to when use lethal force.

'But when you're under attack, especially at machine speeds, we want to have a machine that can protect us.'

Work also said the much maligned F-35's smart helmet, which can help pilot's track targets, was a key project.

AI was also set to control military vehicles.

We are looking at a large number of very, very advanced things,' citing

recent programs that would deploy cascades of small drones from larger drone 'motherships,'

The AI's would also work together as a 'superbrain'.

'If we launch seven missiles at a surface action group and one missile goes high, and is looking at all the different things that the battle group is doing to defend itself and it sees something new that's not in its library, it will immediately report back on the learning network, which will go back to a learning machine, which will create 'here's something you should do' which will pass it over to human machine collaboration—so the mission commander can make an adjustment on the next salvo and then make a command change inside the software of the missile so that the next seven missiles launch will be that much more effective,' he said.

The Pentagon's skunk works is already using AI to create technology to build the 'super soldier' of the future.

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