ABB Microgrids voiced report script

Anahola/Kapolei, Hawaii, USA, April 2016

SOURCE: ABB

Final test flights for the Solar Impulse team, preparing to take off from Hawaii on the next leg of their historic round-the-world flight using just the power of the sun.

For the crew – including an embedded ABB engineer – the challenge is to convert and store as much solar energy as possible, and transmit it to the parts of the plane that need it most.

SOUNDBITE, André Borschberg, Pilot and CEO, Solar Impulse (English, 24 sec):

“It’s difficult because in an airplane, you can’t cheat. // So efficiency and weight are extremely critical. And that’s interesting – if we can do it in an airplane, using now the technologies which are available to everyone – which are available also to build up a grid system. Because what we are doing in this airplane is exactly what we have to do on the ground.”

And nowhere more so than here in Hawaii, which has pledged to generate 100 percent of its energy from renewable sources by 2045.

Until a few years ago, the Hawaiian island of Kauai generated virtually all of its electricity by burning diesel, which had to be imported at considerable expense.

Now, solar farms like this one account for nearly half their power generation – saving money and cutting emissions.

Just like the Solar Impulse aircraft, Kauai would like to generate, transmit and store local energy in a self-sufficient way – and they’re depending on cutting-edge ABB technology to do it.

SOUNDBITE, Brad Rockwell, Power Supply Manager, Kaua‘i Island Utility Cooperative (English, 19 sec):

“The ABB presence here was key in that it’s really the brains behind the operation – it’s where the power electronics are tying the solar variability with the battery storage so that we get smooth power out of this solar field."

SOUNDBITE, Bob Kagamida, Senior Account Representative Hawaii, ABB (English, 31 sec):

“I think that every day, we prove that you can incorporate renewable generation and bring it on into the grid. Obviously, there are going to be challenges, we’re going to stumble. But when you live on an island and you grow up on an island, you learn to persevere, because you have no one to depend on except yourself. So yeah, absolutely, we’ll get there.”

This “microgrid” technology, driven by ABB, is part of a huge shift in the energy industry which is enabling communities around the world to incorporate and manage renewable power.

At the other end of the United States, Kodiak Island in Alaska is also using an ABB microgrid to manage the wind and hydropower that now accounts for up to 100 percent of its energy.

For other remote communities like this town in the Australian outback, microgrids are the key to making renewable power stable enough to depend on.

SOUNDBITE, Maxine Ghavi, Head of Microgrids, ABB (English, 40 sec):

“There is an energy and grid transformation that’s happening. There’s more complexity in the system, there are more nodes coming into the system that have to be managed – there’s a lot of data that can be managed. And of course if you’re looking at off-grid applications, the number of people that still don’t have access to electricity globally, or they have access to unreliable electricity, is tremendous. The technology’s there. The solutions are there. We have all of that today, and it’s very important to enable these technologies and these solutions to be able to bring quality power to the people who don’t have it, today.”

It’s that expertise – in more than 80 microgrids worldwide – that motivates ABB’s partnership with Solar Impulse, as they look for similar ways to harness clean, green energy to do extraordinary things.

SOUNDBITE, Bertrand Piccard, Pilot and Chairman, Solar Impulse (English, 32 sec):

“The partnership with ABB is not only technological, it’s also a partnership in spirit. Because what we try to do at Solar Impulse is to demonstrate how clean technologies can be used to achieve the impossible. And it’s clear that if we can fly day and night with no fuel, it means these technologies are mature to also help people on the ground to reduce their energy consumption and their CO2 emissions. // And in that sense, I think ABB gives the credibility to what we are doing in the air, because they do it on the ground for everybody."

SHOTLIST

00:09-00:12 WIDE of Hawaii beach with palm trees

00:12-00:18 WIDE Solar Impulse flying over Hawaii (SOURCE: SOLAR IMPULSE)

00:19-00:27 GVs aircraft and crew performing checks on runway (SOURCE: SOLAR IMPULSE)

00:28-00:36 GVs ABB engineer checking equipment

00:37-00:42 MID of pilots in cockpit

00:43-01:02 SOUNDBITE André Borschberg

01:03-01:12 GVs Hawaii scenes

01:13-01:16 MID of ABB battery storage system

01:16-01:46 Aerial GVs of island of Kaua‘i, including solar farms

01:46-02:03 SOUNDBITE Brad Rockwell

02:04-02:35 SOUNDBITE Bob Kagamida

02:36-02:47 GVs solar panels

02:48-02:59 ARCHIVE GVs Kodiak Island, Alaska

03:00-03:09 ARCHIVE GVs Marble Bar, Western Australia

03:10-03:50 SOUNDBITE Maxine Ghavi

03:51-04:04 GVs crew working on Solar Impulse plane (SOURCE: SOLAR IMPULSE)

04:05-04:36 SOUNDBITE Bertrand Piccard

ABB (www.abb.com) is a leading global technology company in power and automation that enables utility, industry, and transport & infrastructure customers to improve their performance while lowering environmental impact. The ABB Group of companies operates in roughly 100 countries and employs about 135,000 people. ABB has been active in India for more than a century and employs more than 9,000 people at 12 manufacturing locations and 22 sales and branch offices across the country.

# More information

http://www.abb.com/betterworld

<http://new.abb.com/power-generation/microgrids-solutions>

More links to follow

## For more information please contact:

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