

APNewsBreak: Taliesin West goes greener

CARRIE ANTLFINGER - Associated Press - Associated Press

Frank Lloyd Wright's strong appreciation and respect for nature factored heavily into his designs for hundreds of structures. In keeping with his legacy, the Frank Lloyd Wright Foundation will try to modernize the architect's winter home, Taliesin West, with environmentally friendly updates and attempt to lower its annual \$200,000 energy bill.

Starting next month, construction will start at the National Historic Landmark, located in Scottsdale, Ariz., in an effort to bring down — and possibly eliminate — the sprawling compound's energy costs. A handful of Arizona companies are donating 4,000 solar panels, replacing 5,000 light bulbs and making the roofs and windows more energy efficient.

Sean Malone, president and chief executive officer at the Frank Lloyd Wright Foundation, told The Associated Press ahead of the official announcement that the home is already a role model for organic or sustainable architecture — Wright nestled the building into the desert foothills of the McDowell Mountains and used nearby sand and stones to build its walls. The upgrades will now help the home become a model of sustainable energy, he said.

"It's something that is entirely consistent with the history and values of Taliesin West," Malone said.

The foundation operates Taliesin West and Taliesin in Spring Green, Wis., does student outreach programs and runs the Frank Lloyd Wright School of Architecture — in Milwaukee and Scottsdale — and the Frank Lloyd Wright Archives in Scottsdale.

Malone believes Taliesin West is one of the first, if not the first, National Historic Landmark to have solar panels installed. Jeffrey Olson, spokesman for National Park Service, which runs the landmark program, said they have no way to track if other landmark buildings have solar panels.

At least one other Wright home, the Ross House in Glencoe, Ill., uses panels, said Janet Halstead, executive director of the Frank Lloyd Wright Building Conservancy in Chicago.

Wright built Taliesin West in 1937 as his winter home and studio. Twenty years passed before Taliesin West was wired for electricity, running on generators until then.

Any change must be done sensitively and in keeping with the original design, Halstead said. Having the landmark designation meant that the foundation had to abide by specific rules, which Malone said dealt with the home's appearance and

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Published on Chem.Info (<http://www.chem.info>)

materials used in its construction, among other things.

Wright didn't shy away from new technology and experimented with his designs, strategically placing windows and constructing overhangs to harness or deflect the sun's rays. Depending on the time of year — and position of the earth — a room could be heated by the sun or cooled by the shadows.

"He was one who incorporated many environmental considerations into his designs for aesthetic and practical value," Halstead said.

The company in charge of the upgrades, Phoenix-based Big Green Zero, says the 500-acre property's historical appearance won't be affected. The thousands of solar panels, for instance, will be placed near existing electrical equipment and power transmission lines at the bottom of a slope. Part of the 1.9 acres of panels will be seen by visitors as they drive up to the main campus, but the vistas Wright designed the home to showcase won't be compromised, Malone said.

"It's not part of the nature that is brought into Frank Lloyd Wright spaces," Malone said. "It doesn't affect that in any kind of negative way and yet we are not apologetic about it either ... It's part of the story. It's now a part of what this place is."

Robert Roth, CEO of Big Green Zero, hopes the solar panels will produce as much energy as the site consumes.

He also said that the other changes are meant to retain the site's historical look. Energy-efficient light bulbs will look similar and provide the same color of light. Lucite found on some roofs will be replaced with similar-looking fiberglass or polycarbonate materials that provide better insulation. The company will also replace the antiquated air conditioning system and will install controls to adjust each room's air conditioning and lighting based on occupancy.

High energy bills led the Wright foundation to Big Green Zero, who provided a free energy audit. Over the last year, Big Green Zero has donated more than \$101,000 in resources and time to the project. First Solar, Inc., based in Tempe, Ariz., is donating the panels and labor — saving the foundation \$1 million. And Roth has been asking other companies to donate time and materials or do the work at a drastically reduced cost.

The foundation still has to pay about \$100,000 for zoning, permits, some equipment and some labor, but Malone said the energy savings will be worth it.

Roth expects the updates to be done within three years, but the work won't affect the 110,000 tourists that visit Taliesin West every year. The Wright foundation's architecture students are also involved, and Roth said he plans to continue working with the students and experimenting with sustainable energy at the site in the future.

As for the 1911-built Taliesin in Wisconsin, Malone said the foundation plans to do

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an energy audit eventually and possibly make similar changes.

Source URL (retrieved on 11/23/2014 - 7:00am):

<http://www.chem.info/news/2012/02/apnewsbreak-taliesin-west-goes-greener>