



These solar panels are similar to the five panels which will be installed on the roof at West Washington as part of a new water heating system. The school will receive \$25,000 in grant money from Hoosier Energy and Jackson County REMC to have the system installed.

## WWSC will purchase solar powered water heating system

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After a discussion that lasted 45 minutes, the West Washington School Board voted 5-1 to proceed with the installation of a solar powered water heating system during a meeting Monday night.

The current system utilizes a 600-gallon water tank which supplies hot water to all parts of the school, a system which is not very energy efficient according to Facility Manager Tim Reinhart.

"The tank is very old and I've been worried for some time about the bottom falling out of it," he said. "If that happens, the school is completely out of commission without hot water and not to mention, flooded."

Reinhart spoke with Superintendent Gerald Jackson about the water heater a year and a half ago.

"I told him then to make it last a year and he's done more than that," Jackson said.

Originally, Reinhart wanted to replace the tank with a tankless, gas powered system which initial bids suggest would have cost between \$26,000 and \$33,000.

Since then Reinhart has discovered a new option which would save the school money and alleviate part of the problem -- a solar thermal drain-back system.

A drain-back system is a closed-

loop, active solar system that uses distilled water as its heat transfer fluid. A drain-back tank is installed on the return side of the solar loop so that when the system does not run, the water collects in the tanks leaving the collectors empty so there is no danger of the water freezing in the winter.

A \$25,000 solar energy grant from Hoosier Energy is available to help the school pay for the project, which will cost \$42,070, according to a bid from Mann Plumbing, the preferred company used by Hoosier Energy.

The cost to the school corporation would be \$17,070, unless additional grants are secured.

"I know it's \$17,000 in a time when we are trying to cut costs, but this is a lot less than the other systems I've looked at and it will save us money on bills in the long run," Reinhart said.

A report from Mann Plumbing presented to the board says: "Based upon assumptions made from the school's current usage and industry averages for schools provided by Hoosier Energy (\$5,000 to \$7,000 a month for hot water) the solar powered system would save several thousand dollars a month."

Jackson said the system would easily pay for itself in six to eight months.

While the solar powered water heating system will solve the immediate problem Reinhart said the board needs to consider a long term plan as well for replacing the hundreds of feet of piping.

"We don't use a lot of the hot water, so it sits and cools in all these lines that run throughout the school and then has to be heated back up again before it can be used, all of which takes energy," Reinhart said. "Honestly, the entire system needs to be replaced with multiple, smaller units throughout the school, but that's just not something we have the money for right now and this solar plan will work for now."

Vice-President Leslie Batt questioned Reinhart about just replacing the entire system. Reinhart explained that the grant is only for solar panel technology and could not be used if a different system was put in.

"Not to mention that replacing everything would cost five or six times what we will spend on the solar project," Reinhart said.

Batt argued that the board would be in a similar situation 10 years from now, saying they should save their money until they can afford to redo the entire system.

Jackson said he didn't feel that was an option given the age of the current water storage tank.

Jim Brown moved to accept the proposal from Mann Plumbing, Inc. and the motion was seconded by Bill VanCleave, passing 5-1 with Batt opposing.

In the proposal, Mann Plumbing stated that the system should be up and running by the time school begins.