

LOCAL NEWS IN BRIEF

Lowell temple to dedicate solar-run Eternal Light

By Jerry Ackerman
Globe Staff

What better night than this, the longest of the year, and almost the eve of Chanukah, the festival of lights, for a Jewish congregation to seek a new source of energy for its Eternal Light, above the Holy Ark?

Tonight, Temple Emanuel in Lowell will do just that, dedicating what may be the first solar-powered Eternal Light in a synagogue.

Consisting of an automobile dome bulb affixed to the synagogue's traditional brass lamp, it is wired to batteries which are charged on sunny days by an array of solar panels on the temple roof. The system replaces a bulb that ran on ordinary house current, which is the modern-day replacement for the olive lamp of historic Judaism.

As Thomas Edison said of his invention of the electric light, this effort was the product of a small amount of inspiration a whole lot of perspiration.

Rabbi Everett Gendler, who also is Jewish chaplain at Phillips Academy in Andover, takes credit for the idea.

It grew from his musings about light and the sun, "how the sun is a symbol of divine power and the way it sustains us," he recalled. That led to thoughts about diminishing petroleum supplies, nuclear pollution and even how the traditional fuel of an Eternal Light, olive oil, is the product of a natural solar-energy collector—an olive tree. "Symbolically it seemed logical to establish a closer relationship to the sun," Gendler said, "and I had heard about photovoltaic cells."

These cells, first developed to turn sunlight into electricity aboard spacecraft, are undergoing development by universities and a number of private enterprises, including at least three subsidiaries of major oil companies, in an effort to reduce their price.

Through electrochemistry, they capture the sun's rays and convert them into tiny amounts of power which can be stored in batteries for later use.

Gendler related his thoughts to Gilbert Roeder, a Temple Emanuel member who is a data analyst at the

Northeast Solar Energy Center. Roeder enlisted Solomon Zwerdling, director of research and development there, to help him figure out what parts were needed and how to assemble them.

From the Arco Solar Co. in Chatsworth, Calif., a subsidiary of Atlantic-Richfield Oil, came the two solar panels, each nine inches wide and 43 inches long, which were mounted facing due south on the temple roof Tuesday night. While the panels carry a list price of \$400 each, they came at a discount through friends of Temple Emanuel.

And from the ESB-Wisco Battery Co. of Raleigh, N.C., came a donation of two heavy-duty industrial storage batteries which now are tucked behind the organ in the temple sanctuary, collecting the energy from the panels to keep the Eternal Light burning steadily day and night.

"Of course none of this is cost-effective," Roeder said, estimating its value at about \$1000. "But this is a very important light bulb, small though it may be, and it's quite an elegant way to keep it going."

In tonight's service starting at 8, Gendler plans to first light a traditional olive oil lamp, then use hand-rolled beeswax candles to light a seven-branch menorah, and only then turn on the solar-powered Eternal Light.

The sequence of these different forms of energy, he said, is meant to be symbolic of the stages of illumination of human lives, both physically and spiritually.

"I like to think of the olive as a very fine early solar collector," Gendler said. "But one member of my congregation did remark, 'I go along with all this, yes, but please don't try substituting the battery for the olive in my martini.'"