

Army Corps studying tidal energy in Cape Cod Canal

Tuesday, 22 July 2008

Consultants for the Army Corps of Engineers are conducting a study at the east end of the Cape Cod Canal to determine if it's feasible to tap the famous waterway's hydro-power.

The idea to harness rapid tidal flow to take advantage of alternative and renewable energy possibilities is not new. It's been studied before – before the price of a barrel of oil topped the \$145 mark and government entities started worrying about fuel-line items becoming budget busters.

Six years ago, a hydro project was envisioned near the railroad bridge in Buzzards Bay, but the size of the equipment needed was thought to be so big it would prove a hindrance to Canal navigation.

Now, however, science and technology have advanced and the Canal still produces a huge amount of energy (except for its slack-tide periods each day). Capturing that energy and harnessing it are not a premiere federal priority, but the idea has merit, given those continually rising energy costs.

The new analysis of the Canal's tidal action as a form of renewal energy may no longer stretch the edges of technological fascination.

Bourne's Alternative Energy Study Committee says the previous study of what the Canal could do to reduce electric bills was a bust simply because the envisioned equipment at that point could not handle tidal change. The project would also have blocked marine navigation.

Committee Vice-Chairman Robert Schofield said times have changed, however, and the Corps has now retained a contractor to "test equipment outside the navigable channel" at the Canal's east end near the Visitor's Center at the Sandwich Bulkhead.

"They're trying something, but it doesn't sound too opportunistic," Schofield said last month. "The Corps' first job is making sure the Canal is always navigable to marine traffic. But the Corps is also open to new ideas. If something happens on this, it would have to be outside that channel. But, as I say, they're considering ideas. They're open to them."

Another committee member, Thomas Gray Curtis Jr., said "there's a huge amount of energy there. It's a shame it hasn't been taken advantage of."

The committee agrees on one point, even this immense tidal energy would not produce power every hour of every day. But, they say, it has more capacity than wind.

"You'd almost need a sluice way to cap the flow," committee member Paul O'Keefe said.

Then there's the argument that alternative energy projects beg basic questions: Can they stand on their own? Will they disrupt operations or missions? Will neighbors protest? And will they be dependent on subsidies, grants and gifts?

Difficulties aside, the study committee says the Corps' interest in harnessing alternative energy from its own backyard is a step in the right direction, especially in light of the nation's oil shock.

"They're just as interested as everyone else in reducing their energy costs," O'Keefe said of the federal agency headquartered on Taylors Point.

There is some concern as to whether alternative energy being harnessed from the Canal would be reliable. No energy supply is 100 percent reliable. The ethanol industry, for instance, is being buffeted by Midwest flooding at a time when the economy is increasingly reliant on corn for fuel.

The Corps, meanwhile, is reviewing the possibility of partnering with the Bourne Recreation Authority and Massachusetts Maritime Academy to construct a second wind-turbine at Mass. Maritime.

The current turbine is situated next to Commodore Hendy Field on the west side of the academy's campus. The second might be built in shallow water beyond the bow of the training ship Enterprise.

This cooperative governmental venture, however, is still in the nascent discussion and basic-review stages. But if a turbine is built, it might serve to further reduce the cost of energy consumption at Mass. Maritime, Scenic Park, the Gallo Ice Arena and the extensive Corps lighting complex along both sides of the Canal.

Source: WickedLocal.com/Plymouth