

## Province needs to be aggressive in developing tidal power

By ROGER TAYLOR Business Columnist

BLESSED WITH the highest tides in the world, Nova Scotia is finally renewing its commitment to tidal power development, and it's about time.

Nova Scotia has been boasting about harnessing tidal power since 1984 when the then-provincially owned Nova Scotia Power Corp. finished building the Annapolis Royal Generating Station, an 18-megawatt tidal power plant on the Annapolis River that was the first tidal power generating station in North America.

Although it was considered a test plant at the time, with many more expected to be built after that, the reality was that the dream of a burgeoning tidal power sector in Nova Scotia was allowed to all but wither and very nearly die on the vine.

Now, years later, Premier Rodney MacDonald has announced funding for a centre of excellence in Parrsboro and part of that involves three more tidal power test projects, to be built by the private sector in the Bay of Fundy.

While the government should be congratulated for moving forward on tidal power, none of the projects will use homegrown Nova Scotia know-how.

When the tides pass through the narrows between Cape Split and Parrsboro, the flow of water has been clocked as fast as 14 kilometres per hour. It is estimated that 14 billion tonnes of water move through this area every 6 1/4 hours.

Roy Bishop, a former Acadia University physics professor, once estimated that at mid-tide, the flow in the Bay of Fundy's Minas Channel, north of Blomidon, equals the combined flow of all the rivers and streams on Earth. That seems to drive home just how big this idea is. Many people believe the area offers the largest tidal energy source in the world.

But Nova Scotia has a reputation, deserved or otherwise, for allowing opportunities like this to slip through its fingers.

A friend of mine, who was on the inside of negotiations at the time, becomes agitated every time the topic of Nova Scotia wind power comes up. While most people talk about the need to make better use of our wind resource, my friend will remind anyone who will listen that Nova Scotia passed up a chance to become a world leader in the construction of wind turbines in association with a Danish company.

The Danes, he says, had already identified the growing global need for non-polluting energy sources and had focused research and money on creating a wind turbine manufacturing sector in their country. Nova Scotia had a chance to become the North American centre for the Danish technology but a lack of interest and funding meant the project went elsewhere.

Many people believe the same opportunity now exists in the field of tidal power and that Nova Scotia has to be ready to push forward despite the possibility of disappointment.

While a delay of 24 years in getting a second tidal power project off the ground is too long by anyone's standards, the fact remains that we have tides that are unsurpassed anywhere in the world.

Each of the test projects will cost \$12 million to \$15 million and will put turbines on the floor of the Bay of Fundy by next year. The now-publicly owned Nova Scotia Power Inc. is joining with Open Hydro of Ireland; Minas Basin Pulp and Power Co. of Hantsport is working with UEK Corp. of Annapolis, Md., and Clean Current Power Systems Inc. of British Columbia is the third company chosen to test its turbine in the Bay of Fundy.

The premier has predicted that tidal power could supply as much as 15 per cent of Nova Scotia's electricity needs. Others suggest that number is too conservative and that eventually the attraction of using a renewable and free energy source may motivate the creation of more innovative technology that could generate an even larger portion of the province's electricity needs in the future.

Studies have estimated that the cost of energy from tidal power could be four to seven cents per kilowatt hour, which I'm told compares favourably with the cost of burning coal and would be much less than it costs to generate power from burning oil and natural gas.

Tidal power is even more important to Nova Scotia's environment and economy today than it was almost a quarter-century ago. What took so long to get us to this point?