

THE PORT HENRY FACT FINDER

Reporting the News and Needs of Port Henry and Surrounding Area

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Fact Finder's Readers, without whom there would be no Fact Finder**

Wishing all our reader's a joyous and prosperous 2016!

FROM THE EDITOR

This editor has been keeping a rather desultory attention on the GOP primary "circus," but one Associated Press on-line comment (tossed off casually in paragraph 13 of a 20 paragraph recent article) sent chills up and down my spine: "**Trump still sits atop the GOP field, displaying a talent for connecting with voters frustrated with Washington and on edge about the threat of terrorism.**"

This seems an innocent enough statement, unless, you are old enough to remember WWII and also later learning what gave it a stage on which to perform the tragedy.

At that time, German politics was almost stalled into non-functioning by having many different political parties and (against Austria's warning) Hitler was *invited* into Germany in an attempt to consolidate its parties into a more workable number. Nothing, it seems, encourages a country to lose its communal caution more quickly than fear and a lack of real leadership at the top, no matter what the cause of this top-leadership lack.

Note: Associated Presses Scott Bauer of Madison, WI and Kathleen Ronayne of Wolfeboro, NH were contributors to the on-line article.

PREVIOUSLY

The second of on-going dissolution meetings was held December 15, 2015 at the Town Hall. At the meeting was Matt Brassard, Tom Scozzafava, representatives from the Laberge group, the Town's highway Superintendent Jamie Wilson, the Village DPW Superintendent "Digger" Laine, and Art Morgan, the Town's water Superintendent.

Equipment was discussed first, what the Town would need if dissolution occurs. It was decided that the town would need all equipment except two of the Village trucks which would be sold to help pay down Village debt. Next, the discussion focused on the need for a new salt shed in the Village. It was decided that the Village will apply to the DEC for an available grant they offer to build new salt sheds. The location of this shed would be behind the Village Hall where an existing old metal storage barn would be removed to create space for the new salt shed. Also, concerning needed space - a place to house other equipment, as the Town said it will not keep any equipment outside in the weather.

Finally, there was discussion about the current village DPW employees and their move over to the Town. It was proposed that four will be going to the highway department and one will be going to the water department.

The next meeting will be in January when there will be discussion of the Village and Town water plants and their employees.

RESULTS OF EDITORIAL CURIOSITY

How is electricity stored? I never even considered this question until recently when the Moriah Hydro Project came under general knowledge and became a source of interest and conversation. I asked a good many people this question and they looked at me as if I had asked them when they were planning their next trip to the moon; so I tossed the question out onto the internet's huge bosom and here are some interesting answers to my question.

“Almost all electricity is used instantly as it’s generated. The basic problem is that electricity is a flow of energy which travels at nearly the speed of light. That makes storage very difficult. The electromagnetic field/wave that carries the energy moves so fast that it dissipates almost instantly if you don’t use it. By and large, power grid operators simply ramp power plants up and down to provide exactly as much electricity as is needed throughout the day. This ramping capacity is provided by running a mix of low-cost "base load" plants at constant output, and then spinning up additional high-cost "peaker" plants when demand is high. Utilities do extensive demand forecasting and power grid modeling to make sure supply and demand perfectly match at all times. It's a delicate balancing act. The really fine control is handled by a mix of automatic and manual control systems.

The only way to physically store electricity directly is via superconducting rings, which are absurdly expensive and impractical. For practical purposes you can't store the electricity itself, so it has to be converted into some other form of storage. Here is a list of *some* of the usual methods:

- Batteries store electricity by using a redox (oxidation reduction) reaction to convert it to galvanic potential energy (a form of chemical energy).
- Hydrogen synthesis stores electricity by splitting water into hydrogen and oxygen, which can be burned for heat or run through a fuel cell to get electricity directly (another form of chemical energy).
- Pumped-hydroelectric storage facilities use electricity to pump water uphill then, let it flow back down through a turbine to generate electricity later.
- Flywheels use electricity to spin up a weighted disc, and then that angular momentum (rotational inertia) is used to drive a generator to generate electricity later.
- Thermal energy storage uses heat sinks like molten salts to store heat energy then, uses that energy to either generate electricity or provide heating later. Alternatively, electricity can be used to freeze water into ice, and then the ice can be used to provide air conditioning later. (This is a way of *time-shifting* electricity consumption more so than "storing" it.) All of these have significant limitations.

Almost all (>99%) of power-grid-scale energy storage in the world today is pumped-hydroelectric. It's safe and proven technology, with capacity only limited by how big of a reservoir you can find to dam, and how big of a lake near it you can drain. The use of natural terrain and water as the energy storage mechanism reduces the system cost to an affordable level. The efficiency can be quite high -- 70-85% if properly implemented. Developed regions like the US and the EU are pretty much maxed out on hydroelectric capacity due to lack of additional sites, but the developing world still has a lot of room for pumped-hydroelectric growth. No one has any credible suggestions for how to economically store more than, say 5% of daily electricity use.”

The information quoted above is from a larger article by [Ryan Carlyle](#), BSChE, an oil company engineer.

The Port Henry Fact Finder would like to initiate, again, LETTERS TO THE EDITOR. This is inherently a win-win service for all involved, the residents, the Village and the paper.

Residents can not only express their views on village and area wide concerns, but on their own needs in relationship to the village (which is the first and the only level of government where citizens can have as much say in their daily lives as is possible). Requests for information on local subjects can be made and answered.

The village wins because residents do not *have* to attend Board meetings (although this is *the* most recommended way of being able to improve one’s own daily life) and still the village learns how it can proceed most helpfully with its job of governing - without having to just assess and/or guess.

The Fact Finder learns what is of interest to its readers and can report on these specific interests. Please drop-off your letters into the mailbox of the Chamber of Commerce, located between the pharmacy and

the Park. Help Fact Finder and your community in this way!

Look for the next issue on **Saturday, January 16, 2016** at Mac's, Moriah Pharmacy, Sherman Free Library, George's Restaurant, John Eisenberg's Service Center, Ken and Paula LaDeau's Champlain's Best Wash, Don Foote's "Miss Port Henry" Diner, and TFCU.