VAN PORT STERILIZERS INC.

27 April 2009

By Fax To; (604) 660-1102
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ATTN Erica M Hamilton,
Commission Secretary
British Columbia Utilities Commission
Sixth Floor, 900 Howe Street, Box 250
Vancouver, BC V6Z 2N3

Dear Ms. Hamilton

Re; Final Argument, Project No. 3698514; BC Hydro 2008 LTAP

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This LTAP is totally berift of any economic analysis as to the cost-effectiveness of meeting peak load requirements by the use of pumped storage hydro and compressed air energy storage systems (PSH/CAES).

It also failed to consider that PSH/CAES should be deployed, not as an alternative to any particulair resource addition, but rather as a valuable adjunct that would enable optimum use and increased capacity to be derived from all existing resources, whereby such systems could be readily built either on abandoned hydro storages or, in underground mine caverns that have been identified as having ideal geology and topographical features, including at JOR, Britannia Mines, and, near Fort Nelson where there are also high demand peak load markets that do not require any significant upgrades to the transmission and distribution system.

Contrary to Mr. Elton's statement that "we are going to do everything we can to facilitate the development of the renewables industry", this LTAP failed to consider the beneficial use of PSH/CAES technology in order to relieve the primary factors of unreliable generation and off-peak grid demand that are hampering rapid development and efficient use of renewable power generation, whereby during periods of low electrical demand, renewable energy can be employed to compress air and/or to power pumps to transfer water to an upper reservoir, thereby significantly increasing both the value, and demand for, renewables (either at the source, or away from the source). Furthermore, with regard both to Vanport's proposed Ocean PSH plant at JOR, and, with regard also to BC Hydro's promised investigation of the use of PSH/CAES-related 'Hydrolifter' technology, then these technology opportunities should not have been excluded from mention in BC Hydro's 'Final Argument' or, excluded from funding consideration in the 'Order Sought' as these technology options would likely have a profound impact on the competitiveness of all other explored resource options, including for the control of greenhouse gases and for the definition and pricing of 'clean energy'.

With respect to Demand Side Management (DSM), this LTAP

- Offers no discussion of the use of PSH/CAES either to compliment, or, to compete with, DSM,

- Does not consider that DSM, when coupled with PSH/CAES, could provide a more reliable supply side demand response, thus making DSM participation more attractive

- Does not address the cost-effectiveness issue of whether DSM programs are best delivered by BC Hydro, or, by private Energy Service companies,

- Does not address the advisability of BC Hydro being locked into promoting the uncertainties of DSM at the expense of merchant PSH/CAES operators who are likely to have a better overall cost/benefit ratio and to be more profficient at serving the same customers

- Does not address the economic issue of whether spending money on DSM is antithetical to the energy planning and economic development opportunities that could otherwise be afforded, including to consider implementing a crash program to build PSH/CAES plants to facilitate rapid development of a carbon-controlled hydrogen economy and/or to support the development of Community Energy Storage Plants, including building an integrated Ocean PSH – JORVIC STP design that would financed by municipal and industrial waste disposal fees, thereby obviating any need for a separate financial support mechanism (as per Vanport's VASH-Access PSH model that also supports early adoption of Plug-in Hybrid Electric Vehicles, accelerated deployment of dispatchable renewables, deferral of costly transmission upgrades, increased self sufficiency, etc.).

With respect to Appendix F and to the so-called 'high level review' which produced it (e.g. from an elevation of 50,000 ft.), we reiterate that the reports are based on false assumptions made with respect to the design and operating parameters required to earn a profit in the merchant bulk transfer and energy storage business. The fact also remains that BC Hydro never met with Vanport to discuss/revise their conclusions prior to publishing the reports.

Vanport believes that the rationale for these actions are likely political given the review was concurrent to the release of public forest land for private re-development at JOR, as well as being concurrent to the drive by the BCTC to implement both its VITRI and CVI upgrade projects, and, to the concurrent effort of BC Hydro to head off the City of Nelson effort to expand its electricity arbitrage business under the threat of awarding the same privilege to the Capital Regional District. It is also recognized that Vanport itself was likely guilty of over-promoting a complex 'utopian' eco-industrialization scheme that needed to be better understood in order to secure support.

In any event, given that the projected cost to build a conventional sewage plant has now risen to approx. $2 Billions, then a more detailed understanding of integrating a bulk transfer pipeline with an Ocean PSH power plant needs to be achieved so that the cost-effectiveness of such integration is better understood (including the proposed development of a CAES plant in the abandoned Sunro Mine). Certainly, both the local geology (sedimentary) and topography (high head, multiple reservoirs) are likely well suited for achieving cost-effective construction/operation of a series of underground PSH plants that would also benefit from developing a new peak reservoir to accommodate pipeline inflows (in fact, when challenged as to their idea of the best 'length-to-head ratio', they replied that "the best ratio would be 5:1 when in fact, the best ratio is 2:1, as per the proposed Ocean PSH). Furthermore, such an integrated STP-PSH design is also highly relevant to current government efforts to achieve integrated resource management on the south island, including, to develop an effective response to projected sea level rise.

If BC Hydro continues to ignore our concerns and requests as detailed in our evidence, then Vanport respectfully submits that the evidentiary record should be reopened with respect to fairly assessing our proposals, to;

- Assess the critical role PSH/CAES must play in an efficient electrical infrastructure, including its ability to advance the self-healing 'Smart Grid' and to accelerate related deployment of both PHEV's and HICE vehicles,

- Advance the VASH-Access model PSH plant design to control greenhouse gases for the FNGU, as well as to displace the inefficient use of the FNGU for peaking/reserve generation and/or to support exports of higher value hydroelectric to Alberta, and/or to/from Site C, and/or to/from the proposed Nortwest transmission line with an interconnection to the proposed NE Transmission line

- Integrate run-of-river power projects with a proposal to import accelerated glacial melt water to feed reservoirs and PSH plants on Vancouver Island, whereby the pipelines would be laid along the proposed Mainland-to-Campbell River Railway corridor along Bute Inlet and/or near the new Toba Inlet-to-Powell R transmission line corridor, with a branch connecting to Parksville (with service through to Prince George, Tumbler Ridge, and Site C, with possible integration with a 'simplified' version of the proposed Chilco-Homathko power project as a flood control scheme to offset excess flows due to Beetle-Killed-Timber die-off).

Therefore, given that the societal benefits of PSH/CAES technology are a potential 'game changer' for BC Hydro, for the BC Transmission Corp and, for various municipal waste management utilities, and, given that there is also uncertainty regarding the treatment of PSH/CAES technology as to whether it is related primarily to generation or transmission as it can provide functions related to both, and, given that neither BC Hydro or the BC Transmission Corp have developed an overall strategy or policy on how such technology can be incorporated into existing or future components of the power supply system, and,

given that both of these entities are guaranteed to receive cost recovery for their projects (which means they have few incentives to put a PSH/CAES project in place), then Vanport respectfully requests that the Commission should;

- 1. Establish a regulation that all long term planning specifically consider and address the deployment of large scale (eg. > 30 Mw) PSH/CAES technologies as potential components of an integrated plan,

- 2. Address the issue of the lack of regulatory clarity on how PSH/CAES is defined and regulated either for enabling merchant access to the open market, or, for the establishment of a long term Energy Exchange Agreement with BC Hydro,

- 3. Order BC Hydro to engage Vanport and a qualified third party consultant to conduct a more focused evaluation of the JORVIC STP – OCEAN PSH plant, as well as of the possible system-wide impacts of our various PSH/CAES proposals.

Thank you for your consideration, sincerely

Richard Tennant
President

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