

COVER PAGERECEIVED  
06 MAY 2012

To : John Pierce  
Commission Chairman  
The Australian Energy Market Commission  
SYDNEY  
(f) 8296 7899

From : Frederick Leong

Re : Submission to Commission  
on means to a more  
cost-effective power grid

Sheets : 3 incl. Cover Page

Date : 4th May 2012

Frederick G. Leona

John Pierce,  
Chairman,  
The Australian Energy Market Commission,  
Lvl 5/201 Elizabeth St  
SYDNEY 2000.

Dear Mr Pierce,

It is most commendable your Commission has invited submissions to facilitate a more cost-effective peak-time power grid and infrastructure. You point out that about \$12 billion, a very considerable sum indeed, of electricity infrastructure is used for only some 100 hours a year but nevertheless must be provided and non-negotiable for peak-time provision.

In submitting my modest contribution please allow me some lateral thinking. The present and long established off-peak hot water system is obviously a win-win situation for both energy providers and consumers by evening out peak demand and supply reducing costs to both. Could not this principle be developed to a broader picture so as to offset the disproportionate capital required to build peak-time infrastructure for those 100 hours.

Here is my proposition. Given the impressive technological advances in batteries now, viz car batteries and especially in the future, would there be possible merit to having in-situ battery storage capacities in both large and small places, i.e. businesses and homes respectively, that could be triggered during peak demand times, thus alleviating to some extent the need for massive peak-time infrastructure that lies idle mostly but must be on hand always. Naturally these battery units would be charged during off-peak times.

Such in-situ devices are not new as many places have had boiler rooms for many years, emergency generators and more recently solar units as well as the aforementioned off-peak hot water systems.

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Such a widespread system, perhaps numbering millions, if workable should certainly meet your stated aim of "... overall objective is to ensure that community demand for energy services is met by the lowest cost combination of electricity supply and demand". It could save those \$11 billion in public funding especially as I envisage most battery instalment costs to be borne by private users as in current off-peak systems, emergency generators and the like.

Perhaps feasibility studies could be initiated to ascertain the practical implementation of such a scheme. I would imagine any implementation to be a medium - to long-term ongoing roll-out along the lines of the NBN but involving numerous individual users rather than a centralized body.

One can be confident of major battery technological advances as can be seen in the electric car progress and this would only enhance the proposition over time.

Actually there should also be many environmental benefits such as fewer poles, towers, wires and power stations.

If practical such a scheme would certainly provide a partial solution to the problems you have identified.

Trust that the above is of interest to you and the Commission and that you not summarily dismiss it as another 'wackpot' idea. We are all after that 'win-win' solution.

Hoping to hear from you,

Yours faithfully,  
Frederick A. Leong