

The Government put forth two options: Option 1 involves purchasing another 30% of power from China Southern Grid, keeping 20% of nuclear, while natural gas generates 40% and coal (plus renewable energy) provides 10% of power. Option 2 keeps 20% nuclear and natural gas generates 60% while coal (plus renewable) provides 20%. Hence the major differences between the two options lie in the 30% of additional power purchase versus an additional 20% of natural gas generation plus 10% coal generation in Hong Kong

I am in favour of option 2, i.e. generating the additional power in Hong Kong but keeping the choice of fuels open, because of the following reasons:

First, if we buy another 30% of power from the Southern Grid, that is bound to affect the security of supply inasmuch as Guangdong suffers from shortages during certain periods of the year. Unless in the purchase contract, it is stipulated that Hong Kong will have priority of supply in the event of a shortage, supply security will inevitably decline compared with the status quo. And we all know the dire consequences of power shortages occurring in Hong Kong.

Naturally, to alleviate the problem, the power companies in Hong Kong can retain a lot of capacity as power reserve, but that would incur costs to be borne by the consumers.

Further, from the environmental viewpoint, I am not sure if purchasing more power from the Mainland will be beneficial: We do not know how that 30% of power will be generated. Though the consultation document seems to imply that part of it will be cheap HEP from southwestern China, yet coal-fired plants still form the backbone of supply in the southern grid, along with natural gas and other plants. I do not have hard evidence, yet I suspect it would be better for the environment if we generate that 30% of power in Hong Kong rather than buying it from Guangdong.

Additionally, the document surmises that the cost of power will be roughly the same for either options, i.e. there is no economic benefit in buying power. I do not want dispute the Government's assertion here, but there is a lot of uncertainty surrounding cost calculations, and we can foresee difficulties when the two power companies negotiate the price with Southern Grid when Hong Kong gets 50% of its power from the latter.

To sum up, if the security of supply is adversely affected, the environmental impact is worse, and there is no economic benefit in purchasing additional power, we can all see option 1 is not the right choice.

Next, there is no urgent need to decide on something which essentially determines the energy policy of Hong Kong for the next 20 years. If we choose option 1, with the heavy investments in the interconnections and associated parts, and the need of the two existing power companies to accommodate the requirements of that option, e.g. the decommissioning of old plants, the deferments/cancellation of any new plants and the need to provide a lot of reserve capacity to

meet emergency requirements in the event of supply interruption from the Mainland, essentially we have committed ourselves to one path for the next 20 or even 30 years. Given that power demand will grow by only 1% per year in the foreseeable future, do we need to make that kind of decision now?

Relatedly, if we decide to choose option 2, the expansion plans of the two power companies can be implemented in stages, adding new facilities when the demand justifies it. For example, a combined cycle natural gas-fired plant can consist of a number of units, up to 6 or 8; the units can be commissioned independently when the need arises. Both CLP and HEC have vacant land in their existing plants on which they can build additional units.

Further, other options should be kept open. Could we consider additional nuclear power imports from Guangdong, apart from the imports from Daya Bay? Should we reconsider the LNG terminal on Soko Island that CLP worked on a few years ago? Diversification of sources of supply always enhances security.

Finally, the document seems to imply that when the Hong Kong and China southern grid is fully interconnected, competition can be introduced into the power sector. I am not sure if we can have effective competition in the mode suggested by the document. In fact, I am not even sure if competition will work in the power supply industry: Better study carefully the experiences of the foreign countries that have opened up their market and introduced competition into the industry before Hong Kong jumps onto the bandwagon.

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