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Extension of Use of PPA-expired Power plants: Societal Benefits and Considerate Issues

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Abstract

In Thailand's electric supply industry namely the Enhanced Single Buyer (ESB), there are a number of long term power purchase agreements (PPA). Some of them are imminent to expire. Hence there are increasingly enquiries to prolong the PPA with different aspects of benefit. Basically extension of use can enrich utilization of power plant's infrastructures: fuel supply, water supply and grid connection facilities. Previous study shows that cyclic operation (for intermediate load block) is plausible to benefit all stakeholders. This operational option stands suitable for large independent power producer (IPP). Things may be different and need more forethoughts for the case of small power producer (SPP), to which involves with (usually continuous) steam supply to other industrious sectors. Hence problems should be elaborated to SPP issues.

Thailand's SPPs play for two major roles. Other than being distributed generation (DG), they are either efficient cogeneration or renewables, both of which are expected to use less fossil fuel. In particular concern on cogeneration, removal of PPA-expired SPP may result in multiple impacts viz. less reliable power supply and loss of efficient steam supply. These may endanger Thailand's business climate for industrial sectors. Extension of PPA usually falls into pricing arguments. Continual local power and steam supplies can be made by permitting power plants to stay synchronized to network. Complete shutting them down would revert their direct power customers to draw power from grid. All of these are however unexpected burden to network.

This presentation covers those concerns toward extension of use of PPA-expired power plants including consequences following