Consumers in some areas in Malaysia are very much affected with frequent power disruption or power outages happening in their neighbourhood and in spite of complain, consumers still face this re-occurring power disruption issue. In some settlement areas it just happens once in a while whereas in some areas it happens quite frequently. Domestic consumer, Commercial consumer and also Industrial consumer are all not exempted from these phenomena of power disruption.

The Commercial and Industrial consumer has a way to manage this power disruption situation when it occurs. Industrial and Commercial consumers use the Generator Set as an interim power supply source while waiting for the TNB power to be restored. This is a preventive measure for the Industries to ensure that there is an alternative supply of electricity to run their business running during the power disruption time.

Whereas the situation is different for domestic consumers; the Generator Set is not used in houses for backup power supply and the domestic consumers will just wait without the fan and lights running until the power is restored. Power disruption could happen due to factors like electrical fault, equipment failure, overloading phenomena at both at the utility side or at the consumer end. However, most extended power disruption happens due to causes outside the consumer's home.

For example, one such power disruption that recently happened is the due to the Transmission Line Protection Relay failure. The Star news reported on Tuesday, December 20, 2011 that a Protection Relay issue had resulted in power disruption affecting consumers in few areas in Sarawak. Consumers staying in the Serian, Sarikei, Sibu and Bintulu experienced power disruption ranging from few minutes to few hours.

Another power disruption scenario affecting the consumers was during the event when hundreds of passengers were stranded inside the Electric Train Service (ETS) and at the Tapah Road Railway Station. The trains were unable to operate without electricity. This incident was reported at The Star News Friday, Nov 25, 2011.

The National Consumer Complaints Center (NCCC) has recorded 1422 power based customer dissatisfaction cases in year 2010 and power disruption in the housing area consists of a big portion of the total power related cases.

In general, there are 2 types of power disruption, planned and un-planned. The planned disruption or planned electricity 'down time' should be notified in advance to consumers through the media so that they can be prepared when the down time occurs. However, efforts should be increased at the operation side of the utility company with good preventive measure practices so that the unplanned power disruption occurrences could be minimized to zero and such sudden down time event that create big discomfort at the consumer end can be stopped.

Consumers should be aware that TNB has connected sections of housing area by phase. That is why we notice that when one row of houses does not have electricity, another row of houses within the same neighborhood will be lit up with lights. What are the precautionary and improvement measures that could be considered to manage the power disruption event?

- The single phase home electrical wiring system in Malaysia does not cater for incorporation of a Generator Set for houses. Perhaps it is now high time that a design review or study is done on how to improve the home electrical layout so that option to use a Generator set is available for interested domestic consumers.
- In the event of power faults, TNB should conduct investigation to ascertain the cause of it and if it is due to the reasons that could have been avoided, then TNB should take the responsibility and provide compensation to the affected consumers.
- Consumers should be careful on the 'overloading factor' at their houses. One example of overloading could happen when a section of houses in a neighbourhood connected to one of the TNB phase has a high number of air-conditioner installed and running at the same time.

To overcome the power disruption due to overloading, TNB will then try to find a way to get the electrical balance in the neighbourhood and more often this happens during an unplanned down time. The best practice is to do what it takes to create the balance even before the overloading tripping occurs in a particular housing area.

P	O	W	ρ	r	D	i۹	er	11	n	ti	n	n
	v	**	·		$\boldsymbol{-}$	٠,	"	u	м		v	

Thanesh Kumar

Water and Energy Consumer Association of Malaysia