

EMA seeking proposals on benefits of virtual ‘power plants’

FROM A1

alent to powering close to 300 four-room HDB flats for a month.

This level of reduction could be realised if all current participants successfully adjust their electricity usage during peak periods for one hour.

Commercial sectors reliant on heating, ventilation and air-conditioning, and industrial processes like gas production, are among those with the scope to reschedule operations to off-peak times, said EMA.

Businesses can participate in the programme if they can offer to reduce their electricity consumption by at least 0.1MW and respond to peak demand prompts on short notice of about three minutes.

Participants have to declare their usual levels of electricity consumption and how much they are willing to reduce.

Those that fully fulfil their commitment will receive one-third of the savings from the reduction in electricity prices.

The amount is capped at \$4,500 per megawatt-hour (MWh), which is the existing ceiling for wholesale prices. In 2023, the average incentive payment was around \$2,800 per MWh, said EMA.

Those that deliver less than 80 per cent of the energy savings they committed to will be penalised.

The authorities are also exploring how businesses and households can contribute electricity to the grid.

Singapore’s sources of electricity will be more varied as its power



Deputy Prime Minister and Minister for Trade and Industry Gan Kim Yong (centre) exchanging greetings with oil giant Aramco's president and chief executive Amin Nasser during a tour of exhibition booths at the Singapore International Energy Week, held at the Sands Expo and Convention Centre, on Oct 21. ST PHOTO: GIN TAY

ister for Trade and Industry.

He suggested that they can be gathered together to operate as a single unit providing energy and ancillary services. This single unit, existing in the virtual world, will serve as a “power plant” of sorts, with electricity coming from the people.

For example, this virtual “power plant” can direct excess energy generated from solar panels or ESS to common utilities, as well as heating and air-conditioning at another location.

To that end, EMA and SP Group will do research and development to deploy a 15MW virtual unit that gathers solar photovoltaic sources and ESS. This unit will be part of the electricity market to evaluate its benefits to the power system.

EMA is also seeking proposals from the industry to explore the benefits of such virtual units.

This virtual “power plant” can also inject energy into the grid when there is a sudden loss of supply in the power system, such as outages.

sector decarbonises. This means excess electricity from solar panels on private houses, ESS and electric

car chargers islandwide can be fed to the grid in future. Households and businesses could also earn

from doing so during high demand.

However, it may not be commer-

cially viable for each device to individually provide services to the grid, said Mr Gan, who is also Min-

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