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# With wheeling charges announced, is it all systems go?

The Edge, Malaysia



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PETRA, THE EDGE

The opening up of the national grid for direct access by green energy suppliers and consumers (third parties) has received mixed views amid higher-than-expected system access, or "toll", charges announced at a briefing hosted by the Ministry of Energy Transition and Water Transformation (Petra) on Aug 22.

The third-party access (TPA) mechanism, dubbed Corporate Renewable Energy Supply Scheme (CRESS), marks a real market for the players who can plant up based on demand. This is unlike Malaysia's green energy exports pilot, which remains centralised, where it uses capacity from existing renewable energy (RE) plants contracted to Tenaga Nasional Bhd (KL:TENAGA).

Industry players welcome the physical structure of the programme, as it will deliver "premium" bundled green electricity (actual RE-generated electron) from the power plant to the consumer, unlike existing programmes that transmit RE that is pooled with fossil fuel-generated power.

However, solar asset owners and corporate consumers whom *The Edge* spoke to mostly contest the system access charges, which have been set at 25 sen/kWh for firm (or continuous) power supply and 45 sen/kWh for non-firm (or intermittent) supply.

### Arriving at the pricing

Malaysian Photovoltaic Industry Association (MPIA) president Davis Chong, in an email reply to *The Edge* ahead of the briefing, says the association expects "fair and transparent wheeling charges and grid system information to promote market-driven RE pricing".

Separately, the CEO of a solar asset developer says the structure of the programme "is quite positive and exceeds expectations".

"Now, it is more on the pricing, which is generally on the high side, as the overall cost exceeds the current retail price of green electricity," he says.

The founder of another solar company says: "For us, the tariff means it is hard to get off-takers. Let's see how corporate consumers respond."

One corporate consumer describes the pricing as "unrealistic". In contrast, the CEO of another regional RE company says: "Honestly, it is now up to the respective RE developers to be very competitive in the market. And customers must understand that green electron is more premium than brown."

Very simply, when buying electricity from the grid, a customer pays a base tariff alongside either i) a surcharge/rebate on the fuel costs (depending on the price of coal and gas) or ii) a green premium (if subscribed to green electricity).

When a customer switches to buying from a dedicated power plant via CRESS, the tariff structure will comprise both a generation tariff that has been negotiated (which goes to the power plant owner) and the system access charge (to cover grid operations).

The fuel surcharge, called the imbalance cost pass-through (ICPT), is currently 16 sen/kWh, whereas the Green Electricity Tariff (GET) charges 20 sen/kWh.

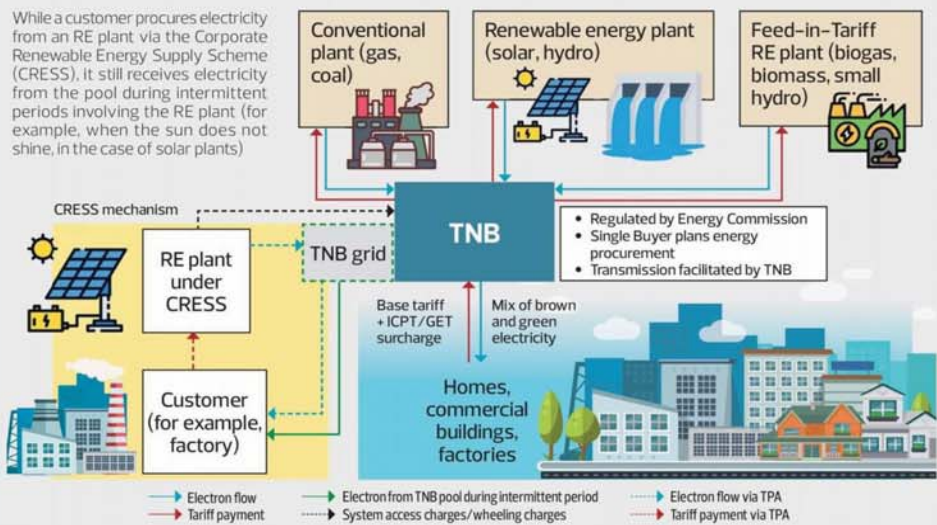
In a nutshell, all-in tariffs for medium- to high-voltage consumers could go to the high 50s sen/kWh (add four sen if subscribed to GET).

For CRESS, the 45 sen/kWh access charges could be added to solar power generation tariffs as a benchmark, which averages at slightly over 20 sen/kWh.

"Yes, the government says the price is competitive compared with regional markets, but it will still be benchmarked against local tariffs. If the RE is at a 10% premium to con-

### Opening up the national grid for more RE projects Grid third-party access (TPA) via CRESS

While a customer procures electricity from an RE plant via the Corporate Renewable Energy Supply Scheme (CRESS), it still receives electricity from the pool during intermittent periods involving the RE plant (for example, when the sun does not shine, in the case of solar plants)



ventional power tariffs, we can still stomach it — but not if it's up to 30%," says the director of a manufacturing outfit that subscribes to net zero. "We might as well offset it with renewable energy certificates for the near term."

Participants of the briefing heard that the access charges comprised components such as transmission costs as well as costs to balance intermittent electricity, which can include battery installation. The pricing is also benchmarked to other markets, such as the UK. The breakdown of the cost structure was not disclosed but is expected to be in the upcoming Regulatory Period (RP) review in December.

With regard to pricing, those who attended the briefing proposed for the access charges to have a clearer connection to the market, such as linking the transmission cost with the industry's RP, and the power balancing costs with the existing ICPT components that track fuel costs.

"The market link will partly address cost structure as well as any periodic review of the access charges," the CEO says. "If the trans-

mission and balancing costs are unbundled, one can work backwards and determine whether it is more cost effective to install battery storage, for example, rather than rely on the grid to address the intermittency."

The breakdown of the tariff structure varied across different RPs. As a standalone, transmission costs took up around 3.5 sen/kWh during RP1 (2014 to 2017). In RP2 (2018 to January 2022), transmission and distribution took up 11.2 sen/kWh of the base tariff, according to Malaysian Electricity Supply Industry 2.0 (MESI 2.0) data. RP3 (2022 to 2024), according to Tenaga's investor presentation, saw regulated business entities (transmission and distribution) take up 13.75 sen/kWh.

A reason for the current bundled tariff structure is the presence of cross-subsidies. There is also a mismatch between the cost and revenue structure. A reflection of this is when erratic consumption patterns, which strain the grid, is not punished through higher electricity bills.

At press time, Tenaga, which operates the owns and operates the national grid, had not responded to a request from *The Edge* to comment ahead of the industry briefing.

### Spurring take-up by serious players

To encourage participation in CRESS, says the owner of a solar asset, regulators could do away with a moratorium period clause that requires investors to keep capital in a specific RE project, such as large scale solar (LSS), for the long term. This clause was meant to avoid speculative flipping of projects, which had in the past resulted in projects being not financially viable for the new owner and becoming stranded.

"[Such requirements do] not facilitate growth of the industry. These projects would require huge investments in the billions, and serious players who want to recycle their capital otherwise will have them stuck in existing assets," says the solar asset owner.

Industry players also call for the government to allow TPA for demand from existing customers (such as existing factories), and not just new demand (new factories) as announced. CRESS will entail new features not available

in other RE programmes in the country. The features include a market support measure that allows solar developers that lose their customers to sell the electricity generated to the grid at eight sen/kWh for a certain period.

CRESS could also accelerate battery storage installation to address intermittency, which is currently not much of an issue, as RE makes up less than one-tenth of the generation mix.

Ultimately, the no-quota policy under CRESS opens doors for the rollout of gigawatts' worth of mega projects underlined in the National Energy Transition Roadmap (NETR). The projects include a 1Gw RE industrial park by Khazanah Nasional Bhd-linked UEM Group Bhd, RE developer Itramas Corp Bhd and other partners.

Another NETR project involves Tenaga, which is spearheading solar park projects with a 500mw capacity, as well as floating solar ventures.

In comparison, UEM and Tenaga's solar park capacities combined are 75% of the 2Gw solar capacity opened up in the latest Large Scale Solar 2024 (LSS5) quota awards. And, in 2003, the UAE's green energy outfit Masdar signed a memorandum of understanding with the Malaysian Investment Development Authority to invest US\$8 billion in RE projects of up to a whopping 10Gw.

Petra has said the framework for CRESS would be fine-tuned after the ministry takes into account the input from the 250 industry players who attended the briefing.

Amid concerns raised on the economic viability of the programme, a former CEO of a regional power company has a more optimistic view.

He says: "It's just like the IPP (independent power producer) days [when the government opened up the power generation segment to the private sector]. The first few players will take the risk.

"It won't be easy because it may be difficult to find banks that will finance the project [considering the off-taker is not national utility group Tenaga like in past power purchase agreements]. But whoever is early in the game and gets it right will make the biggest profits."

ZAHID IZZAN/THE EDGE



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