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BY INTAN FARHANA ZAINUL

The bidding process for the much-anticipated fifth round of the Large Scale Solar programme (LSS5) or LSS-Peralihan Tenaga SuRiA project has kicked off, three years after the fourth round of the LSS tender was announced. The latest round sees a total electricity generation capacity of 2GW or 2,000MW being offered — making it the largest capacity under the LSS programme.

The LSS4 or LSS Mentari project was awarded in March 2021, with a total electricity generation capacity of 1GW. The LSS5 is double the capacity awarded in LSS4 and bigger than the combined capacities of LSS3, LSS2 and LSS1 of about 1,458MW.

The solar power plants to be developed under LSS5 are scheduled to be operational in 2026, according to the Energy Commission (EC).

The difference between the LSS5 and the previous LSS projects is that the latest programme will be divided into four packages, allowing companies of various sizes to bid accordingly. Samaiden Group Bhd group managing director Chow Pui Hee commends the EC for dividing the LSS5 into several packages.

"In the fifth round of the LSS tender, you can bid from as low as 10MW to as high as 500MW, and that is when we see companies that bid 100MW, for example, get the projects because obviously their costs are lower than the 10MW bidders (due to economies of scale). This will also protect the local players," he tells *The Edge*.

When announcing the request for proposal (RFP), the EC said the four packages would range from permitted generation capacities of as low as 1MW to as high as 500MW.

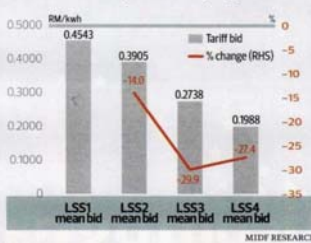
Package 1, taking up 250MW of the total quota, consists of rooftop or ground solar power plants, with a permitted generation capacity of 1MW to 10MW, and will be available to companies with at least 51% bumiputera ownership.

Package 2 — also with a quota of 250MW comprising rooftop or ground solar power plants, but with a permitted generation capacity of 10MW to 30MW — will be open to bids from companies that have at least 51% bumiputera ownership.

As for Packages 3 and 4, which offer the biggest permitted generation capacities under LSS5, they are open to companies that are at least 51% domestically owned.

Package 3, with a total quota of 1,000MW, consists of rooftop or ground solar power plants, with a permitted generation capacity of 30MW to 500MW.

Tariff trend of past LSS programmes



Package 4, with a 500MW quota, comprises floating solar power plants, with permitted generation capacities of 10MW to 500MW.

Catalysts for RE sector but valuation remains stretched

Maybank Investment Bank Research estimates the LSS5 will generate about RM7.2 billion worth of engineering, procurement, construction and commissioning (EPCC) jobs, based on RM3.6 million per MW work value.

"We expect the shortlisted bidders to be announced in 4Q2024, after the deadline for proposals submission on July 25, 2024," the research house says in an April 3 report.

"The rollout of LSS5, ongoing Net Energy Metering (NEM) and the Corporate Green Power Programme (CGPP) will keep the renewable energy (RE) players busy for the next two to three years," it adds.

Among the notable EPCC players in the country are Solarvest Holdings Bhd, Cypark Resources Bhd, Sunview Group Bhd, Pekat Group Bhd and Samaiden.

MIDF Research is keeping a "neutral" call on the power utilities sector as it believes RE EPCC players have "stretched valuations" due to strong share price performance.

"We still like the RE EPCC subsector as key immediate-term beneficiaries of RE initiatives. Prior to the commercial operation date (COD) of LSS5 plants in 2026, industry players will be kept busy by the development of the CGPP, plants which are expected to come on stream in 2025," it says in an April 2 report.

A total of 800MW was awarded under the CGPP, which the research house estimates will generate a potential RM2.4 billion to RM3.2 billion worth of EPCC jobs this year. This will be followed by the LSS5 construction in 2025, which will boost EPCC jobs by about RM6 billion to RM8 billion.

MIDF Research expects the big boys in the RE space such as Tenaga Nasional Bhd and YTL Power International Bhd to come in as anchors in a consortium, especially for the largest-capacity bids.

"One of the key changes in the latest LSS is the rise in capacity bid limit to 500MW (for Packages 3 and 4), which is five times the previous 100MW limit for LSS3 and 10 times the 50MW limit for LSS4," it says.

The capital expenditure requirement for the largest capacity could come in at between RM1.5 billion and RM2.3 billion.

MIDF Research points out that the largest capacity would also be an opportunity for landowners to participate in the project as the requirement for a 500MW solar farm is estimated to be at least 1,500 acres to 2,000 acres of land bank.

"It is uncertain at this point if the regulators will allow multiple locations for each LSS bid," the research firm adds.

Players should not lowball their bids

While the billions of ringgit worth of EPCC jobs from the upcoming LSS5 is mind-boggling, there are several interesting aspects of the new project that make it different from the previous ones. These include foreign participation, the bumiputera portion and inclusion of battery energy storage systems (BESS) to address the intermittent nature of solar power generation.

It is worth noting that the bumiputera participation requirement is only limited to the lower-capacity projects, which industry players deem as reasonable.

"We think it is fair to separate the packages. This LSS round is more fair to all segments of players as they can compete according to their sizes," an industry source says.

Foreign participation was allowed in the first three LSS programmes, but only up to 49% for LSS4 — similar to the LSS5 but only for those bidding in the bigger-capacity packages. After all, the LSS5 project is much larger.

In LSS4, the government took a more "local" approach, allowing only wholly-Malaysian entities or locally listed companies to bid.

Meanwhile, on the BESS installation, the requirement is not compulsory and is open to bidders that want to participate in the energy export. However, the industry is still awaiting one development from the EC — the Energy Exchange, which is meant to be the mechanism for the export of electricity from Malaysia.

Industry players estimate the tariff for LSS projects with BESS to be at 36 sen/kWh to 40

sen/kWh, but it depends on the hours of the battery storage.

"It could [be] double that if it goes [on for] 12 hours or 24 hours," the industry source says.

For comparison, the average generation cost stands at 26.2 sen in Malaysia while Singapore's is 20.69 Singapore cents (69.52 sen).

With BESS, the LSS project tariff and cost would be higher, making the bidding process interesting to watch. This is especially as the LSS4 bidding round drew overly competitive bids, which was a big issue.

The LSS4 programme saw 30 winning bidders in total, comprising 10 projects of 50MW each, and 20 projects of between 10MW and 29.99MW. According to the EC website, only 11% out of the 823MW awarded has been completed as at 4Q2023.

An industry source says a number of companies had dropped out from the LSS4 programme, while many have missed the end-2023 COD.

Last month, Energy Transition and Water Transformation Minister Datuk Seri Fadillah Yusof said there would be no more extensions for delayed LSS4 projects. This means that those that have not completed their projects will have to pay the agreed amount of penalties.

An industry source hopes that the EC would look into other aspects and not just award to the lowest bid.

"Price competition is not always the most effective strategy. At the end of the day, we also need to grow the RE players in the country. On the other hand, companies shouldn't lowball their bids just to win solar projects and to show their investors that they are doing something," he says.

MIDF Research points out that one of the key pain points in prior LSS programmes was the "excessive competition" to supply energy to a single buyer, which has driven down returns to single-digit levels.

"The CGPP model in our opinion is a more liberalised model allowing players to seek their own off-taker, thereby allowing better price discovery in the market.

"Having said that, we also take note of the fact that the CGPP is essentially exclusive arrangements between solar power producers and their off-takers that require a fair allocation of grid upgrade costs [to accommodate more injection of intermittent RE sources to the grid], which is currently absent," it says.

"Once such fair cost allocations and third-party access (TPA) to the grid is established, we believe a more liberalised model for large-scale RE [projects] could be expected." ■