Merredin Energy Pty Ltd
ACN 124 273 025
C/O- Palisade Asset Management
Level 27, 140 William Street
Melbourne VIC 3000
Dale.Waterson@palisadeims.com.au
PO Box 203
Collins Street West VIC 8007
Telephone +61 3 9044 1123

19 May 2021

Rule Change Panel
Executive Officer
C/o Economic Regulation Authority
PO Box 8469
PERTH BC WA 6849

support@rcpwa.com.au

Merredin Energy Submission: "Method used for the assignment of Certified Reserve Capacity to Intermittent Generators" (RC_2019_03)

1. Background

Merredin Energy Pty Ltd (MEPL) owns and operates the 82 MW open cycle gas turbine power station located near Merredin, Western Australia (referred to as the Merredin Energy Power Station or MEPS). The financial performance of the plant is highly dependent on the revenue earned by providing Reserve Capacity under the Reserve Capacity Mechanism (RCM). The implementation of the ERA proposed Relevant Level Method (RLM) has the potential to decrease the Capacity Credits that the plant could be awarded by AEMO under revised Wholesale Electricity Market (WEM) Rules.

2. Impact of new Relevant Level Method on initial NAQ for Generators

The introduction of the Network Access Quantity (NAQ) Framework was designed to provide incumbent generators with some protection from the *"unhedgeable risk of being inefficiently displaced by new entrant facilities connecting in constrained sections of the network, where that additional capacity is not needed for system reliability but is simply displacing an existing performing resource."*[1]

The amount of NAQ issued to incumbent generators is limited by the transfer capability of the network in the regions that generators are already located in the South West Interconnected System (SWIS). MEPS is in the East Country / Mid-East region of the SWIS and it is our understanding that there are already transmission constraints in the region that may limit the output of incumbent generators under some circumstances. The

[1] Energy Transformation Taskforce, Assigning Capacity Credits in a Constrained Network, Network Access Quantity – Key Design Parameters, Information Paper, 20 February 2020 p.4.

list of generators that are in the East Country / Mid-East region of the SWIS is shown below along with their current and future allocation of Capacity Credits under the new Economic Regulation Authority's (ERA) proposed RLM. There are two methods that have been presented to the Rule Change Panel – 'ERA Proposed Allocation' and 'Delta Method'.

Table 1: East Country and Mid-East Zone Generators Relevant Levels (MW) – ERA Proposed Allocation and Delta Method

Facility code	Station name	Participant group	Plant type	Nameplate capacity (MW)	Capacity Credits (MW) 2020 RCC	ERA Proposed Allocation (MW)	Delta Method (MW)
NAMKKN_MERR_SG1	Merredin Gas Turbine	Merredin Energy	Diesel engine	92.6	82.0	82.0	82.0
TESLA_NORTHAM_G1	Tesla Northam	Tesla	Diesel engine	9.9	9.9	9.9	9.9
NORTHAM_SF_PV1	Northam Solar Farm	Northam Solar Project Partnership	Solar PV	9.8	1.6	1.3	0.9
AMBRISOLAR_PV1	Ambrisolar	Metro Power	Solar PV	1.0	0.2	0.1	0.2
MERSOLAR_PV1	Merredin Solar Farm	Risen	Solar PV	100.0	13.7	16.5	10.8
INVESTEC_COLLGAR_WF1	Collgar Wind Farm	Collgar	Wind	206.0	21.8	30.0	64.9
Total				419.3	129.2	139.8	168.7

Source: Rule Change Panel, RC_2019_03 Draft Rule Change Report, 20 April 2021 and AEMO, Capacity credits assigned for the 2023/34 Capacity Year, 4/11/2020.

The Rule Change Panel's draft decision is to adopt the Delta Method for determining the Relevant Level for intermittent generators. If the Delta Method is adopted, then the potential level of Capacity Credits allocated to the Collgar Wind Farm could be substantially increased to 65 MW (up from 21.8 MW in the 2020 Reserve Capacity Cycle or RCC). It is our understanding that the potential Capacity Credits awarded to East Country generators will exceed network limits in that region under the Delta Method. If this is the case, then for the 2021 Reserve Capacity Cycle, AEMO could be required to reduce the amount of Capacity Credits issued to existing generators in the East Country region to ensure that Capacity Credits do not exceed network transfer capacity in that region.

Under the proposed NAQ framework, the initial Network Access Quantity will be set at the lesser of the amount of Capacity Credits awarded to East Country generators in the 2021 Reserve Capacity Cycle or the Certified Reserve Capacity assigned to each facility in the 2022 Reserve Capacity Cycle.

MEPL is concerned that MEPS may be awarded less than 82 MW of Capacity Credits for the 2021 RCC due to the introduction of the new RLM (Delta Method). As a result, the initial NAQ could also be set below 82 MW.

There is the possibility that existing generation facilities on reference services receive fewer Capacity Credits compared to 2020 RCC levels when AEMO undertakes the NAQ assignment process in the 2022 RCC. This could be due to new and additional information, and its incorporation into a new model being developed by AEMO to model network capacity available for generators in each region.

The Capacity Credit Uplift mechanism was put in place to help manage this risk for existing generators. MEPL is concerned that this mechanism will not ameliorate the impacts of the new RLM. As stated earlier, if the initial NAQ for MEPS is already set below the 2020 RCC level (82 MW), and then AEMO lowers the level of Certified Reserve Capacity again in 2022 RCC, then the Capacity Credit Uplift can increase Capacity Credits awarded to MEPS by the difference between the initial NAQ and Certified Reserve Capacity level in 2022. If the initial NAQ

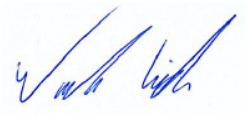
is already lower due to the introduction of the new RLM, then the Capacity Credit Uplift will not assist MEPS to maintain its 2020 RCC Capacity Credit level (82 MW).

The purpose of the NAQ framework and the Capacity Uplift mechanism is to protect existing generators from the *"unhedgeable risk of being inefficiently displaced by new entrant facilities connecting in constrained sections of the network".* We are concerned that the proposed framework for the NAQ and the Capacity Uplift mechanism will not protect existing generators from the *"unhedgeable risk"* of the introduction of a new RLM, that appears to be having a significant impact on the future Certified Reserve Capacity of the Collgar Wind Farm.

While we appreciate the intent of the new RLM is to provide a more accurate method for determining the capacity value of intermittent generators, this method should not have a detrimental impact on the level of Capacity Credits awarded to dispatchable generation, that can be dispatched to meet peak load or cover for forced outages of generators. Despite the proposed increase in the Certified Reserve Capacity of the Collgar Wind Farm, this plant cannot be dispatched by System Management (except downwards) to meet peak load or cover for the unexpected loss of generators in the SWIS.

We request that the Rule Change Panel consider the implications of these changes to the RLM for existing generators and confirm that proposed mechanisms (i.e., NAQ framework and Capacity Uplift mechanism) do account for the proposed rule change. If not, make recommendations on how changes to WEM Rules and transitional mechanisms could be made to ensure that dispatchable generation is not disadvantaged by changes the RLM for determining the level of Capacity Credits for intermittent generators in a constrained network.

Yours sincerely,



Wacek Lipski

General Manager

Merredin Energy