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2024 Ministerial Determination **Power Generation Projects** December 2024

In alignment with the approved National Integrated Resource Plan (NIRP) 2022, I hereby present the 2024 Ministerial Determination for the procurement of new power generation projects. This directive aims to guide NamPower and the broader Electricity Supply Industry (ESI) in the development, procurement, and execution of key and strategic projects, reinforcing our commitment to enhancing energy security, promoting energy independence, and driving regional economic growth.

This document details the new determination and reports the progress of significant renewable energy projects initiated under previous determinations.

As background to the Ministerial Determination, the Policy and Regulatory Framework informing and supporting the electricity sector includes:

- Electricity Act, Act 4 of 2007
- **National Energy Policy**
- National Renewable Energy Policy

- Independent Power Producer (IPP) Policy
- National Integrated Resource Plan (NIRP)

Guided by these policies and frameworks, and with the new Ministerial Determination, Government is committed to build on the foundations laid by the previous Ministerial Determination to continue enhancing energy security and access for the entire Namibian population, focusing on renewable energy projects that can be implemented across Namibia. These projects are expected to yield significant economic benefits, create jobs during both construction and operation, and improve the livelihoods of residents in the areas where they are developed.

In addition to the Ministerial Determination, the Modified Single Buyer (MSB) Market Model was established in 2019 and is fully operational today. This model was created to encourage further investment by the private sector in the electricity market. The MSB market allows Eligible Sellers, acting as Independent Power Producers (IPPs), to transact directly with Contestable Customers, enabling transmission-connected customers to purchase up to 30% of their energy demand from Eligible Sellers, excluding NamPower. This approach not only promotes competition but also attracts private sector investments, which are crucial for expanding the country's energy generation capacity.

In terms of progress since the previous Ministerial Determination:

- On average, 40% of the country's electricity needs are generated locally from the Ruacana Hydro Power Station (347MW) and various existing local IPPs utilizing renewable energy resources such as solar and wind.
- Additional power is imported from neighbouring countries and the Southern African Power Pool (SAPP) to address shortfalls in local supply, facilitated by extensive past investments in transmission infrastructure connecting Namibia to regional systems.

In 2018, a determination was made to add an additional capacity of 250MW to improve energy self-sufficiency in Namibia. The ongoing projects in line with the 2018 determination include:

- Anixas II 50MW HFO Power Station: A 50MW heavy fuel oil (HFO), power station located in Walvis Bay, reached its Commercial Operations Date (COD) on 30 September 2024.
 The inauguration is scheduled for late 2024 or early 2025.
- 2. Otjikoto 40MW Biomass Power Station: This 40MW power station, with an estimated investment of NAD2.3 billion, has a targeted COD of June 2027. It will be fuelled by locally produced encroacher bush wood chips. The grand breaking ceremony of this power station was held on 15 November 2024.

- 3. **Khan Solar IPP 20MW PV Power Plant**: A 20MW IPP solar PV power plant, near Usakos, is nearing completion, with COD expected in February 2025.
- 4. Omburu Solar 20MW PV Power Plant: This 20MW solar PV power plant, owned and operated by NamPower was commissioned in March 2022 and contributes towards our self-sufficiency target and renewable energy targets.
- 5. Rosh Pinah Solar 70MW PV Power Plant: The planned project represents an investment of approximately NAD1.5 billion and will be owned and operated by NamPower. The engineering and construction contract was signed on 9 September 2024, with construction activities set to commence in January 2025 and COD anticipated by May 2026.
- 6. Lüderitz 50MW Wind IPP Power Plant: The development of 50MW IPP wind power plant near Lüderitz is progressing well and has up to date secured an Environmental Clearance Certificate and obtained a Generation Licence from the ECB, financial closure is expected by the end of June 2025 and COD by December 2026.

In addition to the projects under the previous determination, additional strategic projects are being implemented to assist in the objectives outlined above:

 Diaz 44MW Wind IPP Power Project: This is a 44MW IPP wind power plant near Lüderitz. Construction activities are ongoing with key equipment already delivered on-site, and COD expected by April 2026.

- Omburu 54MW/54MWh Battery Energy Storage System (BESS): With a capacity of 54MW/54MWh, design review and procurement of equipment is currently in progress with construction expected to begin in February 2025, with COD projected for September 2025. This project, owned and operated by NamPower, is crucial in enhancing grid stability and to facilitate further integration of renewable energy sources.
- Obib-Oranjemund 400kV Transmission Line: Construction of the 400kV Obib-Oranjemund line has already commenced and the expected commissioning date of the line is set for July 2025. This transmission line is part of the key backbone infrastructure to increase grid stability and connectivity with the South African power system.
- Auas-Gerus 400kV Transmission Line: Already commissioned in March 2024, the completed section of 400kV lines from the Gerus to Auas Substations is a key backbone line to alleviate potential transmission congestion in central Namibia and will greatly provide additional wheeling capability within the national power grid.
- Auas-Kokerboom 400kV Transmission Line: This project forms
 part of the World Bank funding for Transmission Expansion and
 Energy Storage (TEES) Projects value at close to US\$ 138.5
 million. The project is set for commencement during 2025 as
 part of the larger NamPower 400 kV expansion programme
 worth more than N\$4 billion which aims to strengthen the
 backbone of the national power grid with about 800 km of 400

- kV line. This will provide much needed redundancy on the existing 400kV network.
- 45MW/90MWh Lithops Battery Energy Storage System (BESS) Project: this project is the energy storage component of the World Bank funding for Transmission Expansion and Energy Storage (TEES) Projects value at close to US\$ 138.5 million. The project is currently in development, procurement of the EPC contractor is set to commence in July 2025 with award of the EPC Contract anticipated by June 2026. Commercial operation is anticipated by June 2028.
- Baynes Hydro Power Plant: A bilateral project between Angola and Namibia located on the Lower Cunene River, this plant is set to deliver 880MW, with 440MW allocated to each country. On 18 November 2024, the Republic of Namibia and the Republic of Angola signed the landmark Baynes Implementation Agreement. This agreement solidifies our commitment, as nations and Governments, to ensure the project's successful completion. The next key milestones include securing funding and achieving financial close by the end of 2026, followed by the commencement of dam construction in the first quarter of 2027.

The 2024 Ministerial Determination

In accordance with the NIRP, the 2024 Ministerial Determination introduces a new allocation of 330MW of solar PV capacity for

procurement and implementation. This capacity, split between NamPower and Independent Power Producers (IPPs), is as follows:

Capacity	Allocation	Description
120MW	IPPs	Solar PV via an accelerated procurement process.
30MW	NamPower	Solar PV, EPC procurement by NamPower. The 30MW has been added to the already approved 70MW for a total of 100MW)
80MW	NamPower	Solar PV, EPC procurement by NamPower (Land and ECC are secured, extension of current Omburu Solar PV plant)
100MW	NamPower	Solar PV, EPC procurement by NamPower (dedicated PV plant for Skorpion Zinc)

Further details can be found below:

1. 120MW IPP Solar PV Project: Following a geospatial and technical assessment, the 120MW IPP solar PV allocation will see the development of 6 x 20MW solar PV power plants allocated to Independent Power Producers (IPPs). These projects are strategically earmarked to be constructed in specific regions with limited or no previous generation capacity to foster job creation and ensure local employment during both the construction and operation phases of the power plants, in addition to addressing intermittency grid challenges. The substation has been strategically chosen to

minimise transmission integration costs and minimise impacts on overall projects tariff. The regions identified include:

- Karas Region
- Hardap Region
- Oshikoto
- Otjozondjupa Region
- Kavango West Region
- Zambezi Region
- 2. 30MW Rosh Pinah Solar PV Power Plant: The allocation of an additional 30MW to the already existing 70MW Rosh Pinah solar PV Power Plant (as per the previous determination), is a proactive step to benefit from the existing development works in an attempt to avoid delays, enhance investment efficiency and reduce dependency on imports faster than starting new projects from scratch as the COD remain unchanged by May 2026.
- 2. 80MW Omburu Solar PV Power Plant: Situated within the Erongo region and will thus build on the available land and existing infrastructure in place. NamPower will own and operate the new 80MW project adjacent to the existing Omburu solar PV Power Plant and connecting to the Omburu Substation. This expansion will ensure that the project will maximise on local job and employment creation in the region.
- 3. **100MW Skorpion Solar PV Power Plant**: As Skorpion Zinc Mine has previously been predominantly supplied by the Eskom power system, a special determination is required to facilitate

the development of a 100MW Solar PV Power Plant to assist in providing a local solution to a significant load customer. The project, which will aid in the revival of the mine will facilitate the realisation of significant macro and micro economic spinoffs. Normally, the mine employs up to 600 direct and 1,000 indirect employees. The new mining project, which includes the development of a new refinery and conversion project, is expected to create an additional 2000 jobs during construction and up to 800 jobs during operations. The government will prioritize these job opportunities for local Namibians, across all skill levels, including professionals, to support the sustainability and growth of the country's technical, mining and engineering sectors. However, this project's initiation remains contingent on finalizing the power supply agreement between Skorpion Zinc Mine and NamPower to ensure Namibian consumer does not cross subsidize the mine.

Concluding remarks

In conclusion, the 2024 Ministerial Determination is a bold step forward in Namibia's journey towards energy independence and sustainability. It reflects a cohesive strategy aligned with our broader economic goals and our commitments under international environmental accords. As we implement these projects, we are laying down the groundwork not just for a sustainable power grid but for a sustainable future for all Namibians.

Together, we are powering our nation towards greater prosperity and resilience, ensuring that every citizen benefits from the dividends of peace, progress, and sustainable development.

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MINISTER