

**AGENDA of the
Portfolio Committee: Infrastructure & Planning
20 April 2021
(Also the agenda for the Mayoral Committee Meeting 28 April 2021)**

**5.
RENEWABLE ENERGY**

16/2/1

SU Muller

29 March 2021

Director Infrastructure and Planning

(028) 313 8019

1. Executive Summary

The national government recently changed the country's energy regulation, empowering municipalities to purchase electrical energy directly from independent power producers (IPPs) and/or to develop their own generation facilities. This opens opportunities for the municipality to transition from dependence on Eskom to renewable energy.

2. Service Delivery and Budget Implementation Plan - IGNITE

Directorate of Infrastructure and Planning
Electrical Services

3. Compliance with Strategic Priorities

Provision and maintenance of municipal services
Creation and maintenance of a safe and healthy environment
Promotion of tourism, economic and social development

4. Delegated Authority

None

5. Legal Requirements

Electricity Regulation Act (Act 4 of 2006), ERA
ERA, Electricity Regulations on New Generation Capacity (as amended 2020)
ERA, Licensing Exemption and Registration Notice (March 2020)

6. Background/Discussion/Evaluation/Conclusion

Background

For over a decade, South Africa had to content with the effects of a constrained energy supply. This led to regular load shedding events. At its core, load shedding is the consequence of Eskom's inability to maintain its power plants and to develop new generation capacity.

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Therefore, in his State of the Nation Address on 13 February 2020, the President announced that the government will take measures to rapidly and significantly increase generation capacity outside of Eskom.

One of the measures announced was to enable municipalities to procure their own power from independent power producers. This was put in place with the amendment of the Regulations on New Generation Capacity on 16 October 2020.

Discussion

The electricity supply industry is regulated by the Electricity Regulation Act (ERA), Act 6 of 2006. Electricity Generation is regulated by the Electricity Regulations on New Generation Capacity (regulations in terms of ERA).

On 16 October 2020, the Regulations were amended to allow municipalities to apply to the Minister to procure new generation capacity in accordance with the Integrated Resource Plan, subject to the following conditions:

- Conduct a feasibility study,
- Comply with the Municipal Systems Act, specifically Section 76,
- Comply with the Municipal Finance Management Act, specifically Section 120, and
- Alignment with its Integrated Development Plan.

In addition, when a municipality applies to the Minister, it must be in good financial standing.

To assist municipalities to take advantage of the new Regulations, the Provincial Government of the Western Cape initiated the Sustainable Infrastructure Development and Financial Facility (SIDAFF), and the Municipal Energy Resilience Project (MER).

1. Sustainable Infrastructure Development and Financial Facility (SIDAFF).

The SIDAFF is an initiative of the Department of Local Government (DLG), in co-operation with GreenCape and Agence Francaise de Developpement (AFD).

The objective of the programme is to support municipalities to:

- facilitate the process of identifying a pipeline of catalytic infrastructure related programmes and projects that are bankable (may be funded), based on the outcome of an effective feasibility study;
- identify and enhance the accessibility of both financial and non-financial resources in order to plan, develop and implement the pipeline;

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- identify and analyse the Environmental, Social and Governance (ESG) implications and sustainability impacts measured by the Sustainable Development Goals (SDGs) of catalytic projects and programmes, relative to the financial impact on the Municipality's finances and on the local economy; and
- identify the funding needs to be sourced from all relevant stakeholders and in particular the use of private sector funding in order to reduce the reliance on the National fiscus and achieve long term competitively priced and sustainable funding which recognizes the long-term nature of the assets being funded.

The Overstrand Municipality is one of eight municipalities in the Western Cape selected to take part in this program.

2. The Municipal Energy Resilience Project (MER).

The MER is an initiative of the Green Economy Unit of the Department of Economic Development and Tourism (DEDAT).

The project is to assist municipalities to take advantage of the new energy regulations, which may include purchasing energy directly from Independent Power Producers (IPPs).

The project will help municipalities to understand the requirements of the new national energy regulations, whilst at the same time mitigating related risks. It will also provide network and operational capacity requirements for the development and procurement of energy projects in municipalities.

The Overstrand Municipality is one of six municipalities in the Western Cape selected to take part in this project.

In addition to the two Provincial Government programs mentioned above, the Municipality has embarked on the following activities:

- The municipality has an active Small-Scale Embedded Generation (SSEG) program, with 25 clients taking part in the program. This program allows municipal clients with renewable energy generation capacity, for own use on their own land, to feed excess energy into the municipal electricity network. The program started in 2016 and the municipality has a total SSEG capacity of 201kVA connected to the grid.
- The municipality is in discussion with two IPPs regarding the installation of Solar Photo Voltaic plants in Kleinmond (18MW) and Gansbaai (10MW).
- The municipality is in discussion with a renewable energy company, regarding the installation of a pilot Microbial Fuel Cell (MFC) system for the generation of electricity from municipal wastewater at the Hermanus

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Wastewater Treatment Plant. The project is for a phased implementation, starting with a small pilot plant and over time increasing the capacity up to 5MW.

- The municipality is in discussion with energy trading company Enterprise Power (en/power). They approached the municipality regarding a pilot project to assist them to obtain an electrical power trading license from NERSA. The pilot project is for a capacity of 1 MW and can be expanded.

Evaluation

New energy regulations provide the municipality with the opportunity to purchase energy directly from IPPs and/or develop their own generation capacity.

Due to Eskom's inability to provide in the energy needs of the province, the Western Cape Government is embracing the new regulations as an opportunity to assist municipalities with the transition from Eskom to renewable energy. This also support the provincial ambition to become the Green Energy hub for Africa and to transition to a low carbon economy.

The Overstrand Municipality has been selected the take part in two provincial initiatives aimed at taking advantage of the new energy regulations, namely the Sustainable Infrastructure Development and Financial Facility (SIDAFF), and the Municipal Energy Resilience Project (MER).

With the opportunities arising from the new energy regulations, and the support provided by the provincial government, the municipality is investigating a variety of renewable energy projects.

Initial investigations indicate that the municipality's financial position cannot accommodate the high capital expenditure required to develop own renewable energy generation capacity. However, the municipality owns an extensive and well-maintained electricity distribution network. Therefore, the municipality is ideally placed to purchase renewable energy from SSEG suppliers and IPPs, and also to allow other service providers/clients to transport energy generated by them to other consumers, using the municipal network, commonly known as energy wheeling.

Conclusion

Given the world wide trend to mitigate climate change by transitioning to a low carbon economy, Eskom's inability to provide sufficient energy, and the government's new energy regulations, it is essential that the municipality make use of the current opportunities to transition it's energy supply to renewable sources and reduce its dependency on Eskom.

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7. Financial Implications

None

8. Staff Implications

None

9. Comments from other Departments, Divisions and Administrations

Electrical Department: Managers: D Maree (Gansbaai and Stanford) and K du Plessis (Hermanus and Kleinmond).

The Electrical Department supports the new regulations and the initiatives being considered by the municipality.

10. Annexures

None

RECOMMENDATION TO THE COUNCIL:

1. that Council takes cognisance of the support received from the Provincial Department of Local Government through the Sustainable Infrastructure Development and Financial Facility (SIDAFF), and the Provincial Department of Economic Development and Tourism through the Municipal Energy Resilience Project (MER);
2. that Council approves that the municipality transition its energy supply, where feasible, to low carbon and renewable sources, in compliance with the revised Regulations on New Generation Capacity and all other relevant legislation, by:
 - (a) Continuing with the Small Scale Embedded Generation program;
 - (b) Developing renewable energy sources;
 - (c) Procuring renewable energy from Independent Power Producers; and
 - (d) Making the municipality's electrical network available to compliant and approved energy producers and energy traders to wheel energy over the municipal electrical network.
3. that Council mandates the Municipal Manager to enter into any and all required agreements to effect the above;

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4. that Council approves the use of the Overstrand Municipality's electrical distribution network by ENPOWER TRADING (PTY) LTD, for wheeling electrical energy over the network, at an agreed fee, to be calculated and taken up in Council's Tariff list in future, with the volume of distribution capacity to be agreed in a Use of System Agreement and a Joint Operating Agreement, as may be amended from time to time; and
5. that the approval in 4 above is on condition that ENPOWER TRADING (PTY) LTD will not have the exclusive use of the municipal distribution network, and that other energy wheeling and/or energy trading customers be offered a similar opportunity when required.

RESPONSIBLE OFFICIAL :

S MULLER

TARGET DATE FOR IMPLEMENTATION :

**ONGOING IMPLEMENTATION
OF RENEWABLE ENERGY
INITIATIVES**

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**THIS MATTER SERVED BEFORE THE JOINT PORTFOLIO COMMITTEE ON
20 APRIL 2021, WHICH COMMITTEE RECOMMENDED AS FOLLOWS:**

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3. that Council mandates the Municipal Manager to enter into any and all required agreements to effect the above, subject to compliance with all relevant and applicable legislation;
4. that Council approves the use of the Overstrand Municipality's electrical distribution network by ENPOWER TRADING (PTY) LTD, for wheeling electrical energy over the network, at an agreed fee, to be calculated and taken up in Council's Tariff list in future, with the volume of distribution capacity to be agreed in a Use of System Agreement and a Joint Operating Agreement, as may be amended from time to time; and
5. that the approval in 4 above is on condition that ENPOWER TRADING (PTY) LTD will not have the exclusive use of the municipal distribution network, and that other energy wheeling and/or energy trading customers be offered a similar opportunity when required.

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