

**MINISTRY**

**MINERAL RESOURCES AND ENERGY**

**REPUBLIC OF SOUTH AFRICA**

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 **Memorandum from the Parliamentary Office**

**National Assembly: 1400 (\*199)**

Please find attached a response to Parliamentary Questionfor ***written reply*** asked by **Mr M G Mahlaule (ANC) to the Minister of Mineral Resources and Energy:**

**Ms Ntokozo Ngcwabe**

**Deputy Director-General: Mining, Minerals and Energy Policy Development**

**………………/………………/2023**

Recommended / Not Recommended

**Mr. Jacob Mbele**

**Director-General: Mineral Resources and Energy**

**………………/………………/2023**

Approved / Not Approved

**Mr. S.G Mantashe**

**Minister of Mineral Resources and Energy**

**………………/………………/2023**

**1400. Mr M G Mahlaule (ANC) to ask the Minister of Mineral Resources and Energy: [🟊199][ Question submitted for oral reply now placed for written reply because it is in excess of quota (Rule 137(8))]**

Considering that the Integrated Resource Plan (IRP) of 2019 will be reviewed in its entirety, including specifically to update electricity demand forecast up to 2050, and that the revised IRP of 2023 will be submitted to Cabinet for approval by the end of the 2023-24 financial year, (a) what are the preferred energy generation technologies identified in the revised IRP 2023 and (b) how will the preferred energy generation technologies address the short- to long-term energy challenges that the Republic faces on least-costly electricity as well as the supply and demand balance? **NW1428E**

**Reply:**

1. The process of developing the IRP is mainly a technical modelling activity of the power system. Inputs assumptions into the model consider all commercially viable and proven generation technology options. The output of modelling is the proposed energy generation technologies are a function of cost, environmental impact and lead time. The output is also a function of energy availability factor of the existing generation plant including the decommissioning plan.
2. At the Policy level the output of the technical model should take into account energy security and energy sovereignty and the needs of South Africa as a developing country. The preferred plan should therefore consider the impact on the economy as a whole. It therefore must not be only about least technology cost but about the least cost to the economy.