

SALGA comments: IRP base case Summary of key messages and priority requests March 2017

These comments and suggestions are submitted in the spirit of the IRP being a plan reflecting the realities, needs and resources of all key actors of the electricity sector including local government.

- The IRP has a huge potential impact on LG electricity distributors' capability to provide affordable energy services, impacting on LG economies and finances. Many local electricity distributors face financial challenges. Local economic development and the financial viability of municipalities is integral to the financial viability of the national system.
- 2. Least cost energy services supply to consumers and affordability are the key concerns for local government.
- 3. The electricity industry in South Africa and worldwide is undergoing unprecedented rapid changes, with potential key tipping points in the 2016-2050 time period, driven by technology and cost drivers which are not in local control, especially at the distributor level. Municipalities are already experiencing these changes.
- 4. LG is not expecting much increasing demand on the central system in the near future, except for peak demand. LG is concerned about the potential impact that the cost of over building may have on consumers and on local government finances.
- 5. LG recognises that the total supply of energy services has to increase to meet socio-economic development objectives and that utility scale power plants and the national transmission grid are key assets. However, a substantial part of the demand could most economically be supplied by energy efficiency, demand side management, alternative energy sources and distributed and embedded generation at the municipal level, supported nationally.
- 6. LG electricity distributors account for over 40% of current electricity demand, and are a knowledge and expertise resource. Considering this, SALGA notes:
 - a. Some LG electricity distributors have well-developed energy plans focusing on local resources and investments, financial viability and the move to energy services planning.
 - b. Quantitative analysis and plans of some of the largest electricity distributors are not consistent with IRP demand forecast and present lower cost solutions than IRP2016 Base Case.

- c. Municipal electricity distributors, and their customers and local investors, present a substantial potential resource for the national electricity system and national economy especially if they are not seen as "passive receivers" but as active participants in the planning and supply of an integrated range of energy services and electricity supply, investments in the energy system and a source of load balancing options and flexibility.
- 7. There is sufficient time to develop a thorough, robust and prudent IRP2016, reflecting the needs and resources of all key actors of the electricity sector including local government.

<u>Priority requests for inclusion in the IRP Update</u>: based on the premises identified above SALGA, on behalf of local government, suggests the following for inclusion in the IRP update:

- 1. Active collaboration in IRP planning between national-level team and those LG electricity distributors that currently have the capacity
- 2. A range of future demand forecast scenarios, in this IRP cycle incorporating:
 - a. The modelling of different uptake rates of distributed technologies such as energy efficiency (EE), demand side management (DSM), load shifting, gas, small scale embedded generation (SSEG) and other disruptive technologies (e.g. storage or electric vehicles) and their impact on the demand curves.
 - b. Price elasticity of demand for both electricity supply and substitutes.
 - c. "Bottom-up" demand forecasts from those LG electricity distributors and other actors including municipal own supply where economically feasible.
 - All IRP-scenarios should demonstrate robustness within the range of demand futures.
- 3. Tariff impact studies and wholesale price path development for the different IRP scenarios and further spiral effects on demand. This is crucial to assess the most suitable options.
- 4. In the medium term, bottom up load forecasting process for LG demand, with necessary technical assistance from national level.
- 5. In the medium term, a methodology that integrates modelling of energy efficiency and demand side management, distributed and embedded electricity generation, storage and other energy services as supply options, on an equivalent footing to utility-scale scale electricity generation options.