

**KEYNOTE ADDRESS OF THE MINISTER OF ENERGY OF SOUTH  
AFRICA, Ms DIPUO PETERS, AT THE ENERGY INDABA, 21  
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Programme Director

Organizers of the 2012 Energy Indaba

Distinguished Guests

Ladies and Gentlemen

**Introduction**

I am indeed pleased to welcome you to the 2012 edition of the Energy Indaba, an excellent platform for deliberating on the pressing issues that confront us in the energy space. We are gathered here today, to search for answers to the modern day energy challenges that are facing us especially here in South Africa, and perhaps in the world at large. As you might be aware, this session takes place against the backdrop of a successful hosting of COP 17. After COP 17, it is useful to reflect on the questions we identified as being critical for South Africa's energy future: improved Energy Efficiency, the diversification of our

energy mix towards a low carbon economy, finalization of the Nuclear Power option, Carbon Capture and Storage, and universal access are some of the initiatives that come to mind.

For us as South Africa, we cannot overemphasise the need to accelerate the amelioration of the suffering of rural women and youth from the clutches of unemployment and energy poverty. Climate change and its threat to humanity must be seen in the context of the dichotomy that also threatens our developmental aspirations. We must draw from the success of COP 17 to give practical meaning to the United Nations designation of 2012 as the year of universal access to energy for Africa.

We continue to face serious capacity challenges with regard to electricity. We need to build infrastructure to meet the demands of the 21<sup>th</sup> century and beyond. It was 20 years ago when we last built power infrastructure projects and this poses both challenges and opportunities for us.

It is therefore inevitable that we have to plan ahead and to coordinate our activities in a manner that improves our responsiveness. We have to get the timing of these projects right and ensure that they come in at the correct price. History is full of examples which

demonstrate that long term investment decisions taken particularly during the time of economic downturn have the effect of coming in at lower prices in comparison to times of economic boom. We therefore cannot afford the luxury of indecision – President Zuma made it clear in his State of the Nation address last week, the role that infrastructure expansion is expected to play in growing our economy.

### **Long Term Planning and the IRP**

Programme Director,

The IRP was concluded in March 2010 after an 18 month process of public engagement on the choices that South African preferred for the energy mix going forward. As a matter of principle the process of developing the IRP2 was characterized by extensive consultation, with stakeholders drawn from all interested parties, including industry, community, labour and government sectors. We are grateful that the consultation was open and transparent, and without doubt the most elaborate consultation processes in the energy space.

Experts were drawn from industry and academia to assist our department in developing some of the technical parameters required in

such a process. Whilst it is undeniable that most stakeholders have specific interests that they will take the slightest opportunity to push, this was balanced out because everyone got a fair chance to make their input. Roadshows were held in Gauteng, Eastern Cape, Kwazulu Natal, Western Cape and Northern Cape.

I trust that we are now familiar with the output document, particularly the tables that indicate the different technology options that will balance electricity supply-demand over the next 20 years. The IRP includes supply and demand side options, in the short-medium and long- terms.

### **Financing the IRP**

Financing support for infrastructure development is an important starting point. The financing of economic infrastructure has become very challenging given the global financial crisis that continues to threaten the economies of the developed world. Notwithstanding that the current credit situation remains tight international financial institutions need to increase their assistance for project development in Africa.

The lack of financing for infrastructure projects in Africa has some of its reasons anchored in the poor regulatory environment. It is vital that we identify regional projects to increase the integration and interconnection of the sub-region, through power initiatives initially and ultimately through other trade initiatives.

Failure on our part to address this situation will continue to put enormous responsibilities on our meagre resources and hamper the ideals of uplifting the rural poor, especially women and youth.

We are aware that as a continent we cannot do this alone. It is imperative that the international community play an integral part to overcome the funding impediments afflicting Africa in particular and developing countries generally.

I must reemphasize that, as research points out, unless there is collective focus on building capacity for regional and continental planning and harmonization of regulatory frameworks, the continent's development will remain a pipe dream.

It is our view that this session should provide us with the opportunity to reflect on how governments should put in place coherent regulatory and policy frameworks that support the development of a thriving regional market of over 200 million people in SADC.

## **Energy Efficiency and Municipalities**

Investment in energy infrastructure must have inherent energy efficiency ethos so that we can increase access to modern and clean energy, without compromising either of energy security or the environment.

Energy efficiency is our best hope in the short term, of balancing electricity supply and demand. It is a fact that it also results in the reduction of municipal revenues and we would be doing municipalities a disservice if we did not confront this problem. The contradiction between a successful energy efficiency campaign and reduced municipal revenues needs to be addressed through a revenue decoupling approach – in terms of which municipalities need to be rewarded to the extent of the revenue loss that emanates from energy efficiency. Without this instrument being offered to municipalities, they will be inclined to resist energy efficiency and not implement the initiatives because they result in revenue loss.

From our perspective, energy efficiency technologies have a substantial job creation potential. Consequently financial losses to municipalities must be counterbalanced by not only decoupling the revenue drop due

to energy efficiency, but also by demonstrating the jobs outcomes of energy efficiency programmes.

The Energy Efficiency Campaign Strategy that was negotiated with business, labour, civil society and government at NEDLAC demonstrates the collective seriousness of how we would like to implement the campaign.

Let us spread the message: If you do not use it, then switch it off.

### **Municipal generation**

Some municipalities, particularly Metros, have old power stations that are currently in various levels of capability to generate electricity. Municipalities that have old power stations need to be encouraged to get them functional again, because they represent an opportunity for municipalities to increase revenues at the same time as improving the country's electricity system reserve margin. The Medium Term Risk Mitigation Plan in the IRP has made provision for municipal generation and some negotiations have to be concluded regarding off-take contracts that would make the investment attractive for the relevant municipalities.

## **Electrification**

The electrification effort and universal access to electricity have been proven to be worthwhile investments that yield positive impacts not only for the beneficiaries, but also for the governments that push such programmes. Positive impacts in education, health and social cohesion have been the mainstay of electrification efforts the world over. We need to continue with the electrification effort until we attain universal access.

Access to modern energy carriers will reduce the time our children spend gathering firewood, fetching water, and preparing a meal, instead of attending school and studying. It is therefore imperative that we assist the African continent in achieving the objectives set out by Millennium Development Goals.

Ladies and Gentlemen

## **Tariffs and revenue management**

Utilities across the continent have to focus on revenue management in order to ensure their financial sustainability as they provide improved services. This is especially relevant for municipal electricity distributors in South Africa, who are mandated with ensuring that the masses of our people continue to receive services at prices that they can afford. The implementation of credit control measures and proper metering systems in order to maximize revenue collection, the maintenance of proper balance between dispensing free basic electricity to qualifying customers whilst charging high users cost reflective tariffs for electricity, are critical elements of a sustainable electricity utility.

As you are probably aware the regulator, NERSA, will this year initiate the much anticipated process regarding Eskom's tariff application. Government understands the need for the separation of our role as a policy maker from that of the independent regulator.

However, as we do so we would like to indicate unequivocally that tariffs must rise steadily as we build more generation and distribution capacity. We are going to do everything in our power to ensure that the poor are cushioned against these higher than normal electricity tariffs and that the industrial customers cross subsidize the domestic customers.

## **Fossil-fired generation and the environment**

The increased demand for electricity cannot be met, however, without a negative impact on the environment as coal is still the primary fuel needed to drive the bulk of the world's power stations. South Africa is no exception to this overall picture.

On the one hand, as a developing nation, we need electricity to drive social and economic change. Government has, for example, pledged itself to ensuring that all South Africans have access to electricity. Our implementation partners, Eskom and municipalities have over the years extended their networks and through electrification projects brought quality of life and economic opportunities to many in underdeveloped areas.

On the other hand, ninety-two percent of our electricity is generated using the country's plentiful coal resources. The result is that we generate carbon dioxide and greenhouse gases that are pumped into the atmosphere. Reaching a happy medium between the need for electricity and the reduction of environmentally damaging emissions places South Africa in the same situation as many other nations.

We can work with other nations towards finding ways of reducing emissions and so relieve the burden on our environment. At home we can concentrate on educating our people and gaining their support to create an energy efficient nation which values its electricity and participates actively in conserving this valuable resource.

Looking at South Africa's international commitment to the environment, I am pleased to say that government has been steadfast in mainstreaming environmental considerations in all our infrastructure decisions.

There is no doubt, however, that immediate benefits for the environment can be achieved in South Africa in the short-term if we all consider just how we are using electricity. By taking action on a personal level to reduce waste, we can today begin the process of saving electricity and contributing to the health of our environment.

Every South African can be part of the process. By making individual contributions, no matter how small, we can save energy. We can through our actions ensure that as Eskom builds new capacity we develop habits that are ultimately beneficial to the health of our families. By reducing the need for coal and making better use of

generating facilities we will also be safeguarding our environment for future generations.

## **Independent Power Producers**

Partnerships are critical as we embark on the massive capital expansion programme announced by the President. We have always held the view that government alone cannot solve all our challenges. We remain committed to ensuring that there is space for private sector investment in the electricity generation sector in our country. We are indeed working around the clock to make the regulatory regime more conducive to increased private sector participation in this industry.

You will recall that it has been about 20 years since South Africa last commissioned new power plants. In the 1980's and early 1990s we experienced reserve margins higher than 30% and, over a long period of time, and it was therefore not necessary to build new power stations for a sustained period.

It is, however, common knowledge that our reserve margin has now declined to unacceptably low levels and that our capital investment programme as espoused under the Integrated Resource

Plan, will only provide the necessary relief after Medupi is commissioned.

This brings me to the question of private sector participation in new generation capacity going forward. This commitment was born out of the realization that it is critical for the Independent Power Producers (IPPs) to be brought on stream to complement Eskom, given the reality of the financing requirements of the IRP. It has not escaped us that IPP participation in the power sector is necessary for a number of reasons, including (i) the opportunity to benchmark Eskom's performance in the development of new generation capacity, (ii) the leveraging of private capital to extend our ability to build more power stations, and (iii) the transfer of the technology, construction and financing risk to the private sector.

## **Renewable Energy**

In addition to having IPPs contributing to energy security, we recognize and acknowledge that renewable energy also has the potential of contributing immensely to energy. We need to leverage the available technologies for solar, wind, biomass and biogas that could contribute significantly in scaling up access to energy for Africa's people

and businesses while simultaneously putting the continent on a green and low-carbon development path.

South Africa, just like other countries on this continent, is well endowed with renewable energy resources such as Solar and Wind. However, we still have a huge task of developing them to their full potential. We are very pleased with the enthusiasm with which the Renewable Energy IPP Bidding Programme has been received, and we are working tirelessly to create an enabling environment for the IPPs to contribute to our job creation efforts.

In this regard we have identified clear targets for renewable energy options within the Integrated Resource Plan. We are confident that the targets contained in the Renewable Energy White Paper of 10 000 GWh (approximately four percent of the renewable energy by 2013) will be easily exceeded.

## **ISMO**

We are also in the process of facilitating the establishment of the Independent System and Market Operator (ISMO) through legislation. This entity will be charged with the procurement of power from the

IPPs with the intention to not only level the playing field and eliminate conflict of interest between the buyer and the seller of electricity in a manner that protects all players (from potential market abuse), but it will allow us to drive the efficiencies not normally associated with monopoly utilities.

## **Nuclear**

Programme Director, let me confirm that in June 2008 the Government of the Republic of South Africa approved the Nuclear Energy Policy for implementation. The long-term vision of the policy is to become globally competitive in the use of innovative technology for the design, manufacture and deployment of state of the art nuclear energy systems and power reactors as part of the energy mix, as well as the deployment of nuclear fuel cycle systems to ensure security of supply. These nuclear power reactors will play a role in mitigating climate change by reducing greenhouse gas emissions.

In implementing the decision to introduce additional nuclear power generation capacity to the country's base-load the intention is to diversify the electricity generation mix away from its almost exclusive

reliance on coal whilst addressing the need to reduce the country's carbon footprint, to stabilize the grid and to reduce the risks associated with limited water availability.

It has been clear that we need to formulate Skills Development strategies to address skills shortage, acquisition and retention of the relevant skills in appropriate numbers and also determine the type and quantity of skills required to support the entire nuclear programme:

The categories of skills that will be developed through the nuclear programme include Construction, Plant Operation, Regulatory, industry, Decommissioning and Rehabilitation and Radioactive Waste Management skills. The nuclear fuel cycle strategy for the beneficiation of uranium resources is a key factor with special focus on:

- Securing South African Uranium mineral resources;
- Developing a uranium conversion plant;
- Developing a uranium enrichment plant; and
- Developing a fuel fabrication plant.

I thank you