

Remarks by January Makamba (MP) at CEO Roundtable Dinner - 13 September, 2011

Friends, Ladies and Gentlemen,

I would like to thank the membership of CEO Roundtable for your kind invitation to join you for this dinner and speak before you.

I thank you Ali – for your stewardship of this important forum, and as one of thought leaders in business and society.

You have asked me to speak on two very important issues. Electricity and Fuel. These two issues are complex and multifaceted – and greatly implicate the wellbeing of our country.

It is therefore always a challenge, given the time we have, to exhaust all facets of any of these issues, let alone all. So, I will focus on just a few dimensions that are relevant to as many of us as possible.

I will spend more time on energy – as I know that is of particular interest to most of you. And in this respect I would like to recognise your statement made in July, which not only delivered concrete ideas on how to deal with the crisis but also improved the quality of the energy debate – quality which hitherto had been so wanting.

I would hope that these kinds of dialogue – between government and private sector, between Members of Parliament and business community will continue – as we strive to make our country better.

First, what is the situation now? I don't need to tell you this, but for many years now, the electricity that is generated has not been meeting the demand. In addition, we have not been able to ascertain and plan for the actual demand for power in this country. Still, not being able to meet the demand for only 14 percent of households, for these many years, speaks for the challenge we have in the sector. Anyway, this is another debate, but if we are talking about power shortage as a crisis, then we have really been in a permanent crisis.

According to the Energy Minister's report in Parliament last month, the installed generation capacity in the country is 1,102MW. For a country of 43 million people, this is a very small amount. As of last month, according to the same report, production at all sources was 623MW. Therefore, as we speak, 479MW that we previously had in the grid is now off grid. This is about 40 percent of the capacity.

The current crisis is deeper perhaps because this is a record amount of power to go off the grid. For there to be no load-shedding, we need to add at least 300MW back to the grid.

You obviously have read about what transpired in Parliament last month that led to the initiation of the current emergency measures to deal with the current crisis. My assessment of the plan here tonight is with clear understanding that some of the measures promised are ongoing, but also I recognize that there were milestones to be met before December, including statements made by the Minister last week that there will be movements and relief this week, relief that has so far not materialized. And indeed some of us are duty bound to speak up when we see the public losing trust and confidence in public officials.

So, what entails in the current Emergency Plan?

In short, there are two phases of the Plan. First phase: between July – December, where a total of 572MW is aimed to be added into the grid through additional generation from existing Symbion (37MW) and IPTL (80MW) plants, and introduction of 100MW from Aggreko, 205MW from new Symbion contract, 150MW from NSSF.

Aiming to add 572MW in a matter of four months is quite bold and ambitious. I was excited when it was presented in the Parliament because this kind of ambition and boldness is what I have been calling for. But I was – and I remain – cautiously optimistic. We have seen many broken promises before, most recently the one to generate 260MW by July – a plan that was approved in the cabinet in February but has not materialized up to today.

Nevertheless, we know that the 37MW Symbion generation will be done. We know that Aggreko is already here – because they started the process early during the year (although they were supposed to deliver on August 15). And we all know the story of IPTL – running out of fuel every so often. So, what we are guaranteed by December is at least 137MW.

The 205MW from Symbion is still a “story” as contract has not been signed yet as we speak. Story goes that it is at EWURA waiting for approval. And here lies another question: as a regulator of utility, at what point exactly does EWURA supposed to be involved in power projects? From contract negotiations – as an enforcer of good contracts? Or, during tariff application process – as an enforcer of tariff generated from “prudently incurred costs”? So, while people in government are mentioning Symbion as a solution, Symbion has not yet shipped the plant because I don't think any businessman would mobilize a \$300m equipment without a contract. I still retain confidence that this, in the end, will be done – not so much as a result of

urgency in the government bureaucracy, but for the sheer persistence and need for certainty from equipment supplier and contractor.

The 150MW from NSSF – I know I will be unpopular for saying this: but you can forget about it, at least during this year. They promised to deliver 150MW by December with foggy idea of where they are going to get the plant, and where in Dar es Salaam they are going to install it. They relied on word from people who didn't have even offices, and I heard that a team of 9 people from NSSF and other government institutions went to the United States (why 9 people? I really don't know) and found nothing. Now, there is yet another word that there is a plant in France – and a team of people is going there again tomorrow to have a look – and do "due diligence". But this Paris plant is, first, of less than 150MW and, secondly, of Frame Six type – which is technically complex and takes minimally eight months to install. So, it will not be here before Christmas – if in fact that is what they choose to go with. In any case, one expects that NSSF, as a public institution, will procure this plant through a tender process, which again complicates the matter.

So, again this is phase one of emergency plan. What is the cost? 523 billion shillings. What will be TANESCO's revenues? 115 billion. Deficit: 408 billion. How will it be funded? Through commercial loans. But who will be willing to lend money to TANESCO? None that I know. Therefore, we will most certainly rely on a government guarantee. Now, we just have to be honest with ourselves. This is not just a loan guarantee for TANESCO. This is straight loan to the government. And it will be serviced through taxpayers' money. And there is an injustice here. 86 percent of households do not have electricity, but through the taxes they also pay, they are in effect subsidizing those 14 percent of us who enjoy it.

Another feature of the financing of this plan is that the payments will be in foreign currency. Power producers are paid in foreign currency and fuel to run these generators are imported by foreign currency. Given the magnitude of the payment – if you add phase two of the Plan, which comes to 1.2 trillion shillings – the plan will have implications on balance of payment, foreign currency reserves and strength of the shilling. So, measures will have to be taken so that these expensive emergency power plans do not come at the expense of the stability of the economy.

For the Second Phase of Emergency Plan – running from January to December 2012, there are three projects, which will aim to bring additional 460MW into the grid. Jacobsen Gas Plant in Ubungu, Semco HFO Plant in Nyakato Mwanza, and another Jacobsen Plant of 150MW in Dar es Salaam as well. The interesting thing about these projects is that the first two were supposed to be finished this year – but they are now termed as emergency plans for next year.

And secondly, there are serious issues of fuel to run these plants. As it is today, there

is not enough gas to run the existing gas plants. The earliest time that you can deliver gas to Dar, given the existing gas infrastructure upgrade plans, will be the first quarter of 2013. So, in essence, you will have 250MW of plants sitting idle as white elephants.

I think that it is scandalous to have ordered this Jacobsen gas plant for \$124m almost two years ago, and not plan for the gas to run it. There is a talk that once it arrives, the gas currently used by Symbion to produce 75MW will be diverted to this plant and Symbion will run on Jet A1. That is fine, but it does not, and should not, absolve some people at TANESCO and the Ministry for poor planning – and compelling the nation into an expensive proposition.

Of course, they may have ordered dual-fuel plants – meaning that they can fire them using liquid fuel as well as gas. But, if you consider that the entire 572MW of generation between now and December is supposed to use expensive imported liquid fuels, this will mean for more than a year, our country will be generating a total of 1,032MW using imported liquid fuels. This is next to impossible to sustain. To conclude on the emergency plans, my general view about the emergency plans is that while they are necessary at times, they cannot be something we resort to every time. You can't be in an emergency for five years – as five years is enough time to sort out a permanent solution. Emergency power should be a bridging power, a temporary solution to give you space to find a permanent solution. My hope, which I expressed in the Parliament, is that this will be the last emergency plan.

And ideas on permanent solutions are plenty. This is a country blessed with almost all sources of energy in plentiful: gas, coal, hydro sources, wind, solar, and geothermal. It is scandalous for a country such as ours to generate grid electricity using expensive imported liquid fuels. The question to ask is why, for instance, we don't have a single coal plant despite massive amounts of coal in the country. I am sure you have read about these many plans, some in the books since 1980s. I do not intend to review them here.

But I want to say that the main issue is planning. In energy, nothing is more important than planning. And, in energy planning, 10 years is short term. I just hope that our planners have thoroughly thought beyond December 2012, and 2014 when some of these rental contracts will expire and generation will go off the grid.

So, what do I propose as way forward?

1. Sort out TANESCO –

For better or for worse, TANESCO sits squarely at the centre of energy problems or

solutions in this country. It is a massive utility that is very impressive on paper. Last year, it booked 500bn revenue. It has operating capital of more than \$1bn, and assets worth more than a couple of billion dollars. And it has the capacity to triple its revenue and assets in just five years. Few companies in Tanzania, both private and public, can match these numbers. But TANESCO is not performing as it should – constantly in the red, and having to be subsidised by government. In many other countries, utility companies are blue chips – whose stocks are hot. I remain confident that TANESCO can be the same.

If we can transform TANESCO to what it can be, we may start to see light at the end of the tunnel. But the government will have to figure out what it wants to do with TANESCO. All of us can help to put pressure for the right structure and role for TANESCO.

There have been so many ideas – and so many studies - about the right structure and role for TANESCO. The most popular one is splitting it into three functional and business units.

But the question is: split it and then what? Do you split it but still keep the units in government hands? Or do you privatise all the units or not? Perhaps only one or two? And if so, which ones exactly?

I am in favour of the Kenyan model. TANESCO has too many functions. It generates power, it runs the grid, buys power from IPPs, it owns and operates transmission and distribution system, and it supplies electricity. These are complex functions for one organisation at this point in time. And with the law permitting IPPs and competition in the industry, one can conclude that there is anti-competition environment in the industry. TANESCO should not be negotiating tenders with firms it is by law supposed to compete with – and may one day compete with.

Henceforth, I would say split TANESCO into three functional and business units and issue IPOs for its units. I can guarantee that they will be oversubscribed and you will get all the money you need to invest in energy. Transmission unit will have to be largely owned by government initially – given the big differential between investment and margins. Of course, this is not panacea because the principles of running a business will still have to be adhered to whether you have one or three units, or whether it is a publicly traded company or a parastatal. But at least you will guarantee focus on each business and functional unit. You will also guarantee pressure from shareholders for transparency, better management, better business decisions and accountability for failure – critical elements that are missing at the moment in TANESCO.

In the end, the maturity of business culture and environment will be critical in the

success of this idea. The quality of service of each unit will depend on the efficiency of the other unit. Therefore, there ought to exist commercial discipline that ensures that all three units of the industry – generation, distribution and transmission – are legally bound to honour their obligations to each other. The beauty though is that once you get to a level where you have multiple firms in each unit, competition for high performance will arise and end-users will be able to choose who to do business with.

In the meantime, as it is today, TANESCO can and should be able to make sound business and management decisions – only if politicians stop to be its manager and spokesperson.

A lot of us – and even TANESCO – has been talking a lot about putting new power plants to ease the crisis. But electricity is beyond generators. What about repairing transmission and distribution systems that are currently not in good shape?

For instance, last year alone, mainly because of poor transmission and distribution infrastructure, TANESCO lost 21 percent of power it produced and/or bought. This lost electricity amounted to more than 1,200 GWhr – which is more than all electricity used in factories and businessplaces for the entire year, and amounted to about 75 percent of all electricity bought from Songas in the entire year. These are massive losses – which, if curbed, in themselves would have helped with the power situation. But TANESCO will need to invest in Repair and Maintenance for this to be possible. And we know that this is not happening. While it is required by best [utility] industry practice to spend 12 percent of revenue on Repair and Maintenance, TANESCO spent only 2.8 percent of its revenue on R and M between 2005-2008 – and result is lots of broken transformers and service lines and a huge amount of lost electricity.

2. Make it easy for private investment in energy sector

One of the things I hear the most when I talk to businesspeople is how difficult it is to do business in Tanzania – particularly to invest in energy sector. I am told of people who had come here keen on investing on energy but simply could not bear the red tape and the uncertainty. But what I don't understand is why and how we make it so difficult for people to come in and invest in a sector we so desperately need. The last non-rental private investment in energy in Tanzania was in 2004 – seven years ago. And the last three plants to be built in Tanzania were by the government.

Now, if electricity generation pays – both for private investors and for TANESCO – as it surely does when gas is the fuel, why should the government spend billions of shillings in taxpayer's money to buy generators?

As it is now, there is no power investment guideline – both in terms of process and basis for PPA negotiations – for investors to rely on. Energy deals are structured so differently depending on how desperate the energy situation is at the time, and permits and approvals depends on the depth of your contacts and the kind of pressure or incentives you are able to put.

This must change. Power projects are complex. Private investors commit a big number of people – some up to 30, lawyers and financial people and so on – in a single project just to get the project to take off. And over here, you have few people who are so scattered across government – TIC, BRELA, NEMC, TRA, EWURA, TANESCO, and Ministry of Energy – and who have so many other things to deal with such that these projects do not receive the needed attention.

I believe that planning and overseeing fast execution of power projects should be coordinated at the very top level of leadership of the country, with absolutely no tolerance for delays and excuses. In Nigeria, President Goodluck Jonathan has formed, and chairs, the Presidential Action Committee on Power (PACP) which consists of Ministers and Heads of Agencies that have a critical role to play in Nigeria's power sector. It acts like a "War Cabinet" for Nigeria's power sector, setting policy and granting expedited approvals for critical decisions. The PACP meets every Tuesday, yes, every week! This ensures that issues connected to the power sector enjoy priority attention at the highest level of government. I think we ought to do something like that here given the gravity of the situation – and importance of energy to the economy.

3. Sort out gas issue

Gas, which we have plenty of – and plenty more onshore for the future, is critical for the permanent solution to the power crisis.

So, it is critically important that we sort the fuel question. Why? Because, even if you are able to airlift a 300MW gas power plant to Dar today, you will get Zero power as there is simply no gas. It is not that there isn't enough natural gas in the country. It is just that we haven't planned well to extract and get it to where the generators are at critical moment.

As it is today, in this coming year, we will produce more power from very expensive imported fuel than from cheap gas which we already have in the country.

If you consider when gas was discovered and wells we dug in Songosongo, we are 20 years behind in gas utilisation. If we had planned better in terms of gas infrastructure, today 70 percent of our power generation would have been coming from gas. Given the desperate situation we are in today, everyone is talking about gas infrastructure project or a gas power plant. This is good but it requires better planning and coordination. There ought to be coordination on who is doing what

and when, and at the same time analysing the implications of all these efforts on price and availability of power. A Gas Master Plan is badly needed.

4. Sort out tariff issue

We seriously need to look at the electricity tariff structure. No doubt that TANESCO could do better to manage its cost of service. But we need to decide in this country whether electricity is a business or a subsidized service. The current tariff is not commercially viable. The government recognizes that the current tariff does not work. That is the reason it is subsidizing to the tune of 5bn shillings per year a private company in Mtwara to sell electricity at a price equal to TANESCO's.

Not only does the current tariff hurt TANESCO's balance sheet and its repair and maintenance capabilities, it also discourages private investment in energy sector, particularly in alternative energy. For instance, for solar generation to be commercially viable, the tariff has to be in the upwards of 20 cents (mostly because of the heavy initial investment).

Some may say that it is impossible for the majority of people to afford higher tariff. I don't believe so. Look at how much Tanzanians are spending on phone airtime. The current tariff structure is such that TANESCO sells power at the more or less the same rate to end-users, regardless of whether it is to a barber shop in Namanga or to a Barrick Gold Mine in North Mara. The tariff should be dynamic and flexible given the volatility in the fuel prices and different capacities of TANESCO customers. There are those who will be willing to pay higher tariff as long as power is steady and reliable. For instance, with industries, power, even at higher price, features insignificantly to the cost of production; but when it is NOT available it is a very significant contribution to losses.

4. Coal, Wind, Solar and Geothermal

Ambition and innovation can – and should – be brought to fore to exploit the four critical sources of energy (coal, wind, solar, and geothermal) that we have in plenty, and which other countries are producing huge amounts of electricity from. There is absolutely no excuse that, as it stands today, all these sources – cheap and plentiful – are not being used to produce electricity.

Coal powered industrial revolution in many developed countries. We have it in plenty – in Ngaka, Mchuchuma, Kiwira and other places. Coal is so cheap that, even if you ferry it in ships from South Africa to generate electricity in Dar es Salaam, that electricity may still be cheaper than the one we are going to produce using diesel.

I am happy that at least there are two companies in Tanzania exploring the

possibility of producing electricity through wind. We need to move fast the approval processes.

On solar, few companies have come in to express interest in putting up solar farms – and produce up to 300MW. The issue, of course, with renewable has always been the high tariff. But one company that has such big solar projects in different parts of the world presented a proposal to sell solar power to TANESCO at 25 cents per KW. But we said it is too expensive – which is true because TANESCO sells power at about 10 cents. But then again, we are now buying power from some companies at about 37 cents, power generated from fuels which we import through foreign currency!

Geothermal energy is generated from steam resulting from underground volcanic activity – steam that run turbines to produce power. Many countries with underground volcanic fields – Iceland being the leading one – are producing electricity. Kenya is. There is no reason we shouldn't. We have more volcanic fields, the Rift Valley, a case in point – and therefore higher potential – than Kenya, but Kenya decided that, by 2018, 50 percent of its electricity will be produced through geothermal. And 25 percent of this year's Kenya's energy budget has been set for development of geothermal power. Of course there is a huge initial cost of exploration of fields that discourages the private sector investment. What Kenya has done, and what we ought to do, is establish geothermal authority, in which government funds exploration, and put proven fields to tender. The outcome is that those who win tender even reimburse the government for exploration costs. This we must do.

I want to end up here on energy issue, as there are simply too many things to talk about – things that we may take up as we interact later.

Fuel Crisis:

Very briefly on fuel crisis: The nation almost went to a standstill weeks ago when a new price announcement by EWURA resulted into protest by OMCs. It was embarrassing both for the government and for EWURA, causing great inconvenience to the people and businesses. This is what I know:

1. In a new indicative price formula that EWURA used, the platts (base) price for diesel that EWURA used was for a cheaper, high-in-sulphur diesel type that we don't import anymore (5000ppm). So, that led to an arrival in lower indicative price.
2. The exchange rate that EWURA used was BOT's with a margin of 20-25 shillings against the actual rate used by importers.

3. We know that ships wait for an average of 30 days to offload fuel at the port – and each day a ship is charged \$20,000 – \$22,000, and these charges are reflected in the cost of fuel import, and eventually pump price. But EWURA provisioned for 3 days at a cost of \$18,000 per day – something against reality.

4. On wharfage (port) cost on diesel, EWURA's indicative price formula put it at \$7 per metric ton, while Tanzania Port Authority charges at \$10.4 per metric ton. In Mombasa and Beira, the same is charged at \$3 per metric ton. More interestingly, fuel for neighbouring countries that passes through the port of Dar is charged at \$3 per metric ton. Now, why would you charge your people \$10.4 while neighbours who don't have ports charge \$3? And why would EWURA put wharfage at \$7 while it is clear that importers are charged at \$10?

5. Then there is an issue of conversion from metric tonnes (used for importation) to litres (used for setting indicative price). The conversion was not realistic.

6. Also, again on exchange rate: the basis that EWURA uses is the rate of first day of the following 14 days that the indicative price is applicable. This would have been okay if fuel importers were paying cash. But we know that most of importers import on credit, and also do not finish their stock in 14 days, and so when the shilling is falling it implicates on their margins.

7. Now, we know that EWURA has been issuing indicative prices since January 2009, and there hasn't been a crisis like this one despite some of these imperfections. This is because some of these imperfections were taken care by a cushion of 7.5% that EWURA had been featuring in the pricing formula. But EWURA immediately removed it – saying that importers are making too much money.

And then there is a folly of EWURA suspending BP, a company which government has 50 percent stake in. Now, if you could not force a company you partly own – and which you have access to all its books and costs – to abide to your new price, then something must be very wrong. The result of BP suspension is that you also share the loss as a shareholder; and as a big importer TRA suffers in revenues.

A debate in necessity for price setting is one we should have. More importantly, I would think that the relationship, the understanding and communication between the regulator and regulated entities is very critical in the functioning of the industry. There is absolutely no need for public fights and show of machismo. And there is absolutely no need to sow divisions among oil importers and treat them differently and isolate others so that industry regulation can prevail.

So, as Government you can force oil companies to sell fuels at the pumps and deliver it from depots – since you control instruments of order. But you can't force an

importer to place an order from the refineries overseas. From what I hear, and I hope it is not true, some companies have reduced their fuel orders to Tanzania, and some have turned around ships that were heading this way.

The biggest impact of the crisis was not just that weeklong of inconvenience – but the deterioration of confidence in EWURA as a regulator, and more so on Tanzania as a market and reliable place to do business.

In concluding

Finally, I would like to challenge you to look at the power situation in Tanzania from a different perspective. I think most in business community have looked at it as constant bottleneck to business progress – and rightly so. But we need to broaden that outlook. With our economic growth expected to hit double digits within this decade, infrastructure investment, especially in power, is obviously the next big thing. Seven years from now, conservative estimates show that Tanzania power demands will hit around 10,000 GWh, and triple that by 2030 at 30,000 GWh. Within the next 20 years, the power sector will attract investments of well over \$30 billion. Generation costs per kWh are projected to drop substantially to 10 cents from current 15.3 cents, and still by 2020, revenues to power providers are expected to hit \$3 billion annually, while their expenditure around \$2 billion. At current values of power to the economy, the power sector will contribute well over \$11 billion to our national GDP by 2030.

This opens up an array of extraordinarily impressive business opportunities for you. And it will be a shame if you stay on the sidelines.

Time is now.

I thank you for your kind attention!