

STANDING COMMITTEE ON PUBLIC ACCOUNTS AND ECONOMY

On the Briefing of the Rural Electrification Programme by the Ministry of Mines and Energy

Windhoek, 28 November 2018

May 2019

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List of Abbreviations

CENORED	Central Northern Regional Electricity Distributors
EIB	European Investment Bank
GRN	Government of the Republic of Namibia
HPP	Harambee Prosperity Plan
kW	Kilo-Watt
kWp	Kilo-Watt Peak
MME	Ministry of Mines and Energy
MPs	Members of Parliament
NC	National Council
NEF	National Energy Fund
PAC	Pubic Accounts Committee
PV	Photovoltaic
PVP	Photo-voltaic Pumps
RE	Rural Electrification
REDs	Regional Electricity Distributors
REP	Rural Electrification Programme
SHS	Solar Home Systems
SIDA	Swedish International Cooperation and Development Agency
SRF	Solar Revolving Fund
SWER	Single-wire earth return
SWH	Solar Water Heaters

Participants

- 1. Honourable Peter K. Kazongominja, Committee Chairperson
- 2. Honourable Philip H. Shikongo, Committee Vice-Chairperson
- 3. Honourable Cornelius V. Kanguatjivi, Committee Member
- 4. Honourable Gerhard Shiimi, Committee Member
- 5. Honourable Joseph Mupetami, Committee Member
- 6. Honourable Lonia S. Kaishungu, Committee Member
- 7. Honourable John M. Likando, Committee Member
- 8. Mr. Daniel Zaire, Deputy Director, Ministry of Mines and Energy
- 9. Mr. Ndilula, Project Manager, REP, Ministry of Mines and Energy
- 10. Mr Himuvi Mbingeneeko, Committee Clerk
- 11. Mr Norbert Uuyuni, Committee Clerk
- 12. Mr August Mathupi, Legal Officer

Report

1. INTRODUCTION

In terms of Rule 155(4) of the National Council Standing Rules and Orders (as amended), the Standing Committee on Public Accounts and Economy is mandated "to deal with questions falling within the ambit of Ministries and Authorities concerned with Trade and Industry, Fisheries and Marine Resources, Mines and Energy, Economic Affairs, Finance and Environment and Tourism."

Furthermore, in line with the mandate of the National Council and its strategic vision and mission for the period 2017 to 2022, the National Council have identified Good Governance as one of its strategic themes upon which the strategic objective of "increased oversight role" is anchored. Through this strategic objective, the National Council is aiming towards overseeing more government programmes in order to determine their impact toward achieving prosperity for all.

Accordingly, the National Council's Standing Committee on Public Accounts and Economy, invited the Permanent Secretary and technical staff of the Ministry of Mines and Energy to brief the Committee on the promotion and operation of Rural Electrification projects by the Ministry. The briefing focused on the management, operations, achievements and challenges of rural electrification projects.

The objective of the briefing session was to afford the Members of the Committee the opportunity to gain a clearer understanding of the rural electrification projects as an economic empowerment tool meant to create self-employment, alleviate poverty and promote self-sustainable economic development of local populations.

2. WELCOMING REMARKS

The Chairperson of the Standing Committee on Public Accounts and Economy (PAC), Honourable Peter K. Kazongominja welcomed Committee Members, delegation from the Ministry of Mines and Energy and everyone in attendance to the briefing on Rural Electrification by the Ministry of Mines and Energy.

In his welcoming remarks the Honourable Kazongominja stressed that rural electrification is a burning issue hence the Standing Committee on Public Accounts and Economy find it imperative to invite the Ministry of Mines and Energy to brief the Committee on the Rural Electrification Programme, vis-à-vis the successes and challenges associated with its implementation.

The Chairperson implored on the Committee members to feel free to ask questions or make contributions after the presentation by the officials from the Ministry of Mines and Energy.

3. PRESENTATION – RURAL ELECTRIFICATION PROGRAMME

The Ministry of Mines and Energy was represented by Mr. Daniel Zaire, the Deputy Director in the Electricity Division. Mr. Zaire was accompanied by Mr Ndilula, the Project Manager for the REP.

Mr. Zaire informed the Committee that the Permanent Secretary could not come to the briefing session due to an urgent meeting with the Deputy Minister of the Ministry of Mines and Energy.

PRESENTATION OUTLINE

- Background
- > Rural Electrification Programme (REP) and Master Plan
- Cabinet directives
- Role players in REP
- ➢ Status of REP
- > Off-Grid
- Solar Revolving Fund
- ➢ 2018/2019 budget and allocation
- Bids awarded and bids pending
- ➢ Challenges of REP
- Solutions to REP

BACKGROUND

- Rural Electrification Programme targets only rural communities and un-electrified public institutions in 13 regions of the country.
- ▶ Khomas region is regarded as fully electrified.
- To ensure that rural electrification is carried out in equitable manner in the whole country, the Ministry of Mines & Energy has developed Rural Electricity Distribution Master Plan in 2000 and reviewed in 2005 and 2010 years respectively.

MASTER PLAN

The Master Plan first looks at:

- > Power supply to schools
- ➢ GRN institutions
- Formal and informal businesses center
- community services connection
- ▶ households in the immediate vicinity of a 500 meters radius
- The Master Plan specifies areas to be electrified during a specific financial year as well as the estimate cost needed to carry out this exercise.

CABINET DIRECTIVES

In 2012, the Cabinet approved New Rural Electrification Approach as follow:

- > Focus on electrification of public institutions (schools),
- > Installation of transformers at formal and informal business centers with no service connections
- Electrifying of Community Households has suspended
- Erongo, Omaheke, Hardap, Otjozondjupa and //Karas regions still receiving households connection
- > The approach is for the period of 2011/2012-2016/2017
- Harambee Prosperity Plan (HHP)



Name	School electrification/Con nection	TRFR	Business center	Household	Urban & Peri-urban	
MME	✓	~	✓	√		
NAMPOWER (Own Funds)		~	~	~		,
NAMPOWER (EIB & SIDA)	✓	~	✓	~		
RED'S			1		1	
					6	

STATUS OF REP

- 1991 to 2017, 1592 public institutions have been electrified and total number of homesteads connection is 48,588.
- > Total cost of the MME programme since inception is over N\$950 million.

OFF-GRID SUPPLY

Off-grid solutions - containerized solar PV systems and mini-grids

Public institutions such as clinics, police stations, schools are electrified in rural areas

PV systems range from 2.8kWp to 25kWp

Larger off-grid settlements like Tsumkwe and Gam were electrified with solar PV/diesel hybrid systems, **202** kWp and **292** kWp respectively

SOLAR REVOLVING FUND

Ministry of Mines and Energy solely administer SRF whose objectives is:

- To provide access to appropriate energy technologies to communities living in off-grid
- To promote off-grid rural electrification through the use of renewable energy systems;
- To improve the quality of lives of people living in the rural areas, through the provision of energy services

Solar Revolving Fund Technologies financed;

- Solar Home Systems (SHS); N\$6,000 N\$35,000
- Photo-voltaic Pumps (PVP), N\$50,000
- Solar Water Heaters (SWH), N\$30,000

The Characteristics of the loan;

- Interest rate per annum = 5%
- Payback period = 5 years
- Eligible to Namibians only
- Between 2011 2018, 3563 systems are financed to an amount of N\$ 98 million

BUDGET ALLOCATION FOR 2018/19 (1)

- > N\$50 million is allocated to rural electrification projects
- ▶ NEF budgeted N\$50 million for Rural electrification
- > N\$70 million is needed each Financial year for a full implementation of REP
- ➢ N\$2 million basic for each region
- Un-electrified schools basis



Budget Allocation for 2018/19 (2)

REGION	Number of un- electrified schools per region	% of un- electrified schools per region	Allocation based on un- electrified schools per region	# of Institution	# of Household	Total Allocation per region (Basic + Allocation based on un- electrified)
ZAMBEZI	26	6.62	4,369,200	4	20	6,369,200
ERONGO	0	0	0	0	26	2,000,000
HARDAP	0	0	0	0	45	2,000,000
//KARAS	0	0	0	0	75	2,000,000
KAVANGO EAST	56	14.25	9,405,000	6	0	11,405,000
KAVANGO WEST	58	14.76	9,741,600	5	0	11,741,600
KUNENE	36	9.16	6,045,600	0	31	8,045,600
OHANGWENA	77	19.59	12,929,400	4	0	14,929,400
OMAHEKE	0	0	0	2	20	2,000,000
OMUSATI	70	17.80	11,748,000	11	0	13,748,000
OSHANA	8	2.04	1,346,400	3	0	3,346,400
OSHIKOTO	56	14.25	9,405,000	7	0	11,405,000
OTJOZONDJUPA	6	1.53	1,009,800	0	30	3,009,800
TOTAL	393	100.00	66,000,000	42	247	92,000,000

Region Zambezi Hardap	Constituency Sibbinda Judia Lyamboloma Linyanti	Name of locality Muketele Sauzuo,	Bid Awarded amount, N\$ 4,540,699.79	Company Bid Awarded
	Judia Lyamboloma	Sauzuo,		Awarueu
	Judia Lyamboloma	Sauzuo,	4,340,033.73	100% complet
Hardap	Linyanti	Mbilajwe		100% complet
Hardap		Samudono. Mbambazi		
	Mariko	Gibeon	4,216,985.03	90% complete
and the second		Gibeon		
	Skrywer Pas	Gibeon		
	Verloorsveld Pos 1	Gibeon		
	Waalpomp	Daweb		
Kavango west	Kapako	Siya Community Hostel	5,358,144.08	30% complete
	Tondore	Mbuuru-ru		
	Neuncuni	Naingopo		
	Mankupi	Nzovhu		
	Tondore	Kaparara		
Ohangwena	Oshikunde	Lazarus Haufiku	6,371,457.13	60% complete
	Oshikunde.	Oshifitu		
	limbili	Omulonga		
	Eniigwena	Eenhana		
2	Aminius	Corridor 17	4,126,601.35	100% complet



Region	Constituency	Name of	Bid Awarded	Progress of
		locality	amount, N\$	project
Omusati	Okalongo	Oneheke	5,669,819.80	95% complete
	Ruecane	Otjorute		
	Eendjeno	Ogongo		
	Mbokolo	Tsandi		
	Omunyele	Outapi		
	Uuhongo	Onesi		
	Onkuma	Outapi		
Oshana	Okatana	Shikoyeni	2,443,861.09	100% complete
	Ongwediva	lidhiya		
	Uukwiyuushona	Omangano		
	Okandonga	Okankolo	5,201,824.90	100% complete
	Ombahe	Eengodi		
	Onamavo	Omuntele		
	Okakondo	Omuthiya		
	Shivolo	Omuthiya		
Otjozondjupa	Omatako	Otjiserandu	3,229,859.24	100% complete
Otjozondjupa	Tsumkwe	Grashoek	6,795,805.17	100% complete
T T	Tsumkwe	Kanovlie	.,,	20070 comprete
Off-Grid	Tsumkwe	Aasviones		
electrification	Tsumkwe	Nhoma		



BIDS closed on 03 OCT 2018

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Ministry of Mines & Energy

Region	Constituency	Name of locality	Cost estimation	Bid stage	
Kunene	Opuwo	Omuramba	6,118,254.00	Awarding	
	Khorixas	Morewag			
Erongo	Karibib	Ondjeombaranga	2,874,740.00	Awarding	
Kavango East	Mashare	Karanawa	5,551,368.40	Awarding	
	Mashare	VR3(970,847.40			
	Mashare	Mantjenya			
	Mukwe	Kangundja			
	Mashare	Fumbe			
	Ndiyona	Kakekete			
/Karas	Berseba	snyfontain	2,400,000.00	Awarding	
Kavango West	Wiring of government	buildings	250,000.00	Awarding	
Omusati	Wiring of government	buildings	1,070,000.00	Awarding	
Oshikoto	Wiring of government	buildings	504,685.00	Awarding	
Ohangwena	Wiring of government	buildings	1,200,000.00	Awarding	
Zambezi	Judia	Lizauli	2,931,800.00	Awarding	
	Lyamboloma				
		Total	22,900,847.40		



Ministry of Mines & Energy

Region	Constituency	Name of locality	Cost estimation	Bid stage
Oshana	Wiring of gavernme	ant buildings	420,000.00	Bidding Process
Engineering Consultancy Services	Whole	Country	8,000,000.00	Bidding Process
Kavango East	Wiring of governme	ent buildings	1,661,647.00	Bidding Process
	Total		10,081,647.00	

FINANCIAL IMPLICATION

- Total Amount for Awarded Bids N\$ 47,955,057.41 million
- Total Cost Estimate for outstanding Projects N\$ 32,982,494.40 million
- Total Cost Estimate = **N\$ 80,937,551.81 million**

CHALLENGES

- Insufficient funds
- > A shortage of qualified electrical contracting companies
- Sourcing of materials/equipment's for contractors
- Sparsely populated villages
- ➢ REP Policies
- Feeder lines and Substations congestion
- Procurement Act

SOLUTIONS

- > Timely projects award
- Update RE Master Plan (grid & off-grid)
- Availability of budgeted funds
- Acquire engineering software
- > Training courses needed in distribution for engineers

4. DISCUSSIONS, COMMENTS AND QUESTIONS ON THE PRESENTATION

Honourable Likando: The pace of rural electrification is slow in meeting targets. Two million allocation per region will not be sufficient due to kind of material needed for example in flood prone areas. Therefore, funds allocation should be based on the rural school ratios per regions. Requested that the secretariat be provided with the rural electrification Master Plan. Urge MME to make use of constituency offices as information dissemination points.

Mr. Zaire: Admitted that limited funds is a challenge, the 2 million N\$ is the basic allocation per region, but it can be increased. The Impalila Island flooding situation is indeed true, and material used is expensive and their installation require specialised material. The Ministry have considered connecting the Island to the Zambian grid but the cost per kW was expensive. The only solution is to connect from the Namibian grid but infrastructure installation is expensive. REP information dissemination is facilitated through regional head offices where hard copies are available. The procurement system, especially the new one is cumbersome. It is not user friendly and this is a problem across government institutions.

Honourable Shiimi: Is solar having capacity to run millet crushers?

Honourable Kaishungu: Praised the MME for its good project implementation.

Honourable Shikongo: How often is the Master Plan being revised, because recent developments are not prioritised?

Mr. Zaire: The Master Plan is updated on 5 years intervals. Next update will occur next year. New needs are normally accommodated even if not on Master List, provided it is an important initiative and funds availability allows. Electrification is done according to Priority List coming from Regions, MME never do without it. Solar capacity depends on magnitude of system installed.

Honourable Kanguatjivi: Priority List was forwarded to MME in 2016 but identified projects still not electrified, e.g. in Epukiro Constituency. Projects and schools electrified

well, but private places not electrified. Farmers with private boreholes could not be connected.

Honourable Shiimi: Powerline between Oshakati and Okahao always off, what can be done to have this line relooked at?

Mr. Zaire: Priority list of Omaheke Region was received but activities completed so far is in accordance with available funds. Powerlines with Single Wire Earth Return (SWER) lines are causing power failures when they are overloaded. REDs takes over the maintenance to look after the infrastructure, in areas where REDs are not present MME persuade Nampower to handle the maintenance. Some REDs have been persuaded to operate outside their areas of jurisdiction, e.g. CENORED mandated to operate in Omaheke Region, while Erongo RED operate in the South.

Honourable Shikongo: Do you notify regions about what you selected from the Priority List?

Mr. Zaire: MME indicate funds available and inform the Regions to adjust their Priority List accordingly. In the past MME used to choose but that created problems for the MME. Priority List can be shared here in Windhoek, so that NC MPs do not miss out on information sent back to the regional council.

Honourable Shikongo: Why are consultants used while there are engineers in government employ?

Mr. Ndilula: MME is planning to acquire Engineering Software and to train staff to do work themselves.

Mr. Zaire: The reality is that there are only 4 engineers for the whole 124 constituencies.

Honourable Likando: Can the projects not be executed in phases if funds are not enough to complete a project once-off?

Mr. Zaire: It can be done in phases; in fact, it has been done in phases in the past. REDs do not belong to MME, they belong to the Ministry of Urban and Rural Development, and therefore policy changes can be directed to the line Ministry.

Honourable Kaishungu: Advised MME to start with Regions with high un-electrified schools.

Mr. Zaire: Where powerlines passes, people who are willing to meet government halfway can approach MME for connections.

Honourable Shikongo and Honourable Shiimi: Advised MME to divert funds to other regions where needs are still occurring.

Honourable Shikongo: Acknowledge that regional offices handle the applications forms but urged MME to strengthen the awareness of the Solar Revolving Fund to rural household owners.

Mr. Zaire: Independent Power Producers are generating power sold to the national grid, thus adding value to Namibia's generating capacity.

5. CONCLUSION

In closing, Honourable Kazongominja extend a word of appreciation to Mr Zaire and his colleague for the information shared with the Committee.

The Committee chairperson further thanked Members for their contributions and further thanked the secretariat for the administrative support rendered to the exercise.

The report with recommendations will be tabled in the National Council's chamber and once adopted the report will be forwarded to the Ministry of Mines and Energy.

6. RECOMMENDATIONS

- 1. The Committee recommends that the Ministry of Mines and Energy increases the rural electrification allocation per region from the current N\$ 2 million to N\$ 5 million per region, in order to have a meaningful impact when it comes to rural electrification.
- 2. The Committee recommends that the Ministry of Mines and Energy direct the Regional Electricity Distributors (REDs) to plough back to the communities within which they operate by installing transformers and provide free prepayment meters to senior citizens.
- 3. The Committee recommends that the Ministry of Mines and Energy reviews the existing Master Plan with a view to accelerate the electrification of government institutions, particularly schools.
- 4. The Committee recommends that the Ministry of Mines and Energy should regularly update Regional Councils on the content of the Master Plan pertaining to each region.
- 5. The Committee recommends that the Ministry of Mines and Energy's review and extend the solar energy programme to rural areas so as to benefit rural communities living in off-grid areas.

Signed

21/05/2019

Hon. C. V. Kanguatjivi Committee Member Date