

# WattsOn



*Powering the Nation and beyond*

The Official Newsletter of NamPower | Edition 2, 2016

## Ruacana successfully completes Runner Refurbishment Project



### In This Edition:

- Ruacana Runners refurbishment project completed
- NamPower and Greenam sign agreement
- NamPower's IEC 61850 and HVDC Test Labs

NAMPOWER  
**1mLED**  
CAMPAIGN



# SWITCH TO LED

## THE NATION'S BULB

Demand for electricity in Namibia has increased drastically and has exceeded supply. The situation has prompted NamPower to implement various solutions to address the shortage of electricity, of which the 1mLED Campaign is an initiative. The 1mLED Campaign is aimed at reducing electricity usage in residential areas during peak times. **LED bulbs last longer** and use far **less electricity** compared to other bulbs.

NamPower will be replacing incandescent bulbs in areas of your house, that are mostly on during the morning **(6:00am - 9:00am)** and evening **(18:00pm - 21:00pm)** peak times, with LED bulbs, **FOR FREE.** NamPower has contracted **LED Champions** who will be visiting your house to install the **FREE LED bulbs.**

**SAVE Electricity, SAVE Money,  
SAVE the Environment**

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#NamPower1mLEDCampaign



*Powering the Nation and beyond*



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# NamPower turns 20



**Kahenge Simson Haulofu**  
*NamPower Managing Director*

**N**amPower turned 20 on 1 July 1996. NamPower's 20 year anniversary marks a vital milestone in its history, as there is undoubtedly so many achievements to celebrate both as a company, and as a nation.

Reliable and sufficient power supply is an enabler for the growth and industrialization of any country. NamPower's commitment and ability to ensure security of supply, without fail for the past 20 years, is a badge that the company wears proudly. This achievement has also given NamPower a respectable reputation from its stakeholders and fellow utilities in the Southern African Power Pool (SAPP).

NamPower was born out of SWAWEK and as a result, a significant amount of resources were already in place when NamPower came into being. Power stations were built during the SWAWEK era, including a transmission network which stretches over long distances. When NamPower took over the baton, it was charged with even more responsibility which included the responsibility to provide efficient and cost-effective electricity to take Namibia to new socio-economical and commercial heights.

Much has been done over the past twenty years in terms of further developing the transmission network and improving the existing generation plants. Millions, if not billions, were invested in the expansion of infrastructure and new technologies.

Some of the main projects that NamPower has undertaken over the past 20 years include:

## **Generation:**

- The Van Eck Power Station which was commissioned between 1972 and 1976 with an installed capacity of 120 MW, is under refurbishment to make the station more reliable and more efficient to meet its original output of 120MW and a guaranteed base-load output of 90 MW for at least another ten years.
- Ruacana Power Station, commissioned in 1978 with an installed capacity of 347 MW, was built with three generators only. A project to replace the runners of the three generators with newly designed runners was initiated in

2013 is now completed, and has improved the efficiency of Ruacana Power Station significantly, increasing the station's current output from 332 MW to 347 MW. More about this project can be read in the pages to come.

In addition, a fourth generating unit was installed at Ruacana Power Station in 2012, which contributed a significant 92 MW into the national grid.

- The Paratus Power Station at Walvis Bay was commissioned in the 70's, with an installed capacity of 24 MW. The station was de-rated to 12 MW and is currently not operational. It is due for units replacement with the aim to increase its capacity to plus-minus 40 MW.

- The ANIXAS Power Station, situated next to Paratus Power Station, was commissioned in 2011 with an installed capacity of 22.5 MW. This is the only power station that has been built by NamPower.

### **Transmission:**

NamPower owns a world-class transmission system and network of 66 kV to 400 kV overhead lines.

The national grid has been designed and mainly built by Namibians. NamPower has over the years developed and continues to maintain its transmission system to accommodate future



*Anixas Diesel Power Station*



demand for electricity as well as expected future generation and import of electricity. Some of the highlights under transmission are:

- The 400 kV power line, which stretches over a distance of 900 km between Aries in Kenhardt in South Africa, through the Kokerboom substation near Keetmanshoop to Auas near Windhoek, was commissioned in 1997. The first leg of the project was completed in 1999, with the second phase, which included the Auas substation, completed the following year. This was one of the longest lines in the world then and could probably still be today.
- In 2010, the historic Caprivi Link Interconnector transmission line, now known as the Zambezi Interconnector transmission line was inaugurated. The 951 km 350 kilovolt (kV), 300 megawatt (MW) High Voltage Direct Current (HVDC) transmission line and converter stations links the far north-east with central Namibia. The link provides a north-south interconnector within the Southern African Power Pool, which forms part of the pool's vision to interconnect the region, and adds to the energy trading potential within the region. It was also specifically designed to ensure reliable power supply to the Caprivi Region that was then connected to the Namibian grid.
- The West Coast Development Project along Namibia's central west coast which involved the extensive transmission infrastructure planning and development due to strong economic development in the Erongo Region. NamPower reinforced the 220 kV transmission

backbone to service new mining activities. More 220 kV lines and substation extensions are planned to further reinforce supply to all areas.

To ensure that electricity is reliably delivered to all parts of Namibia, NamPower has embarked on an extensive transmission expansion plan. Over the next 5 to 7 years, N\$7 billion will be spent on the expansion programme. As part of this programme, a number of transmission projects are currently under implementation.

#### **Financial and Asset base:**

- The company's financial discipline has enabled it to build a strong financial base. This has not only enabled NamPower to carry out small and large scale projects, but has gained the company credibility with financial institutions and development funders by providing the company the opportunity to acquire loans for large scale projects.

In addition, NamPower is proud that the NamPower Provident Fund reached a milestone N\$1 Billion Dollar mark as at 31 January in 2015.

Leaving the most important for last, it is important to emphasise that the success story of any successful company is made and written by its employees, through their combined creativity, skills, diligence and passion to carry out their duties. In July 1996, the staff complement of NamPower stood at 522, with just 35 female employees. Today, NamPower boasts a strong work force of 1036, based across the country.

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*“The success story of any successful company is made and written by its employees, through their combined creativity, skills, diligence and passion to carry out their duties.*”

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These are just some of the company's many achievements over the past twenty years. Steered by its newly appointed Managing Director, Kahenge Simson Haulofu at the helm of NamPower, NamPower will continue to work diligently to achieve the objectives outlined in the country's national development strategies.

So here's to NamPower, to 20 years of faithfully powering the nation, to propelling NamPower to even greater heights, and to ensuring reliable power supply to all our valued customers for decades ahead.

# Runner refurbishment project at Ruacana completed



*The NamPower and Andritz Hydro team during Factory Acceptance Testing for Unit 1 in Foshan, China*



*The Turbine Shaft*

Electricity supply stands at the centre of all aspects of socio-economic development. Strong economic growth and development in Namibia has in recent years resulted in an increased demand for electricity in the country. It is a well-known fact that the whole of Southern Africa and by extension Namibia is facing power supply challenges as demand has surpassed supply and continues to increase.

NamPower's four main sources of generation cannot cater for the local electricity demand. As a result, over fifty per cent of electricity is imported from the region to make up for the deficit. The shortage of power supply will continue to prevail until the commissioning of a base-load power station.

In 2012, NamPower implemented the Short Term Critical Supply (STCS) programme, under

which various short to medium term initiatives are being implemented to address immediate power supply shortages until a base-load power station is commissioned. One of the projects under the STCS programme is the upgrading and rehabilitation of existing generation stations, with the aim to increase local generation capacity by maximising available capacity. The Turbine Runners Replacement Project at Ruacana Power Station is one such initiative.

The project saw the refurbishment of the Turbine Runners of Units 1, 2, and 3 at the station. These units were commissioned in 1978 and physical damage to parts of the runner structures over the years, caused decreased output from all three units. On 24 July, NamPower marked a significant milestone with the successful completion and commissioning of the Turbine Runner Replacement project at the station. The power station's installed

capacity has been effectively increased by 15 MW, from 332 MW to 347 MW, while improvements in turbine efficiency allow the station to generate more electricity during low flow season.

The original design of Ruacana Power Station made provision for the inclusion of a 4th Unit to support future economic growth and to increase the output of the station. The installation of the 4th Unit started in October 2007 and the unit was officially commissioned in 2012, expanding the generation capacity of the station from 240 MW to 332 MW.

The Turbine Runner Replacement project involved the replacement of the turbine runners, Penstock Inlet Valve (PIV) Hydraulic Oil Unit, Digital and Hydraulic governor and other major parts on Unit 1, 2 & 3 at an overall cost of N\$ 140 million. NamPower appointed Andritz Hydro in 2011 to carry out a Computational Fluid Dynamics (CFD) and do a scale model testing of a prototype runner blade design study as part of the feasibility study.

The feasibility study proved that the project was financially and technically viable and would lead to tangible benefits for Ruacana Power Station and NamPower at large. The feasibility study projected that the new X-blade runner will have an increased power output of 5 MW each, improved water discharge efficiency of  $\pm 10\%$  which translates to water savings of about 6-8 m<sup>3</sup>/s at new rated output of 85 MW. Other improvements include reduced cavitation, vortex flow and consequently vibration levels observed through the entire turbine output operating range. All these improvements were realised through advances in runner design and manufacturing.

Andritz Hydro being the original equipment manufacturer was awarded the tender in November 2012 to design, manufacture and supply major components such as, the turbine runner, head cover stationary wearing ring, lower stationary wearing ring, bottom ring, discharge ring and guide vane bottom sleeves and associated components.

The design was carried out by personnel from Andritz Hydro offices in Linz, in Austria. while the manufacturing was done at various locations in Europe and China. The runner was manufactured at an Andritz factory in Foshan, China. The remaining major parts were manufactured in Graz & Linz, Austria. A NamPower team carried out Factory Acceptance Testing (FAT) at the listed locations to ensure strict compliance with NamPower approved designs and drawings.

The refurbishment of the Turbine Runners also covered the following work:

- Dry ice cleaning of generator stator and rotor,
- Installation of new shaft seal (Unit 1 & 3, Andritz Shaft seal & Unit 2 James walker hydro-selle),
- Installation of new sand filter system complete with actuators for supply of clean water to shaft seal
- Repair cavitation damage on the guide vane
- Replacement of old copper piping on the generator guide bearing piping system with stainless steel piping
- Refurbishment and installation of new stationary wearing ring in the head cover and installation of new studs
- Refurbishment of guide vane top sleeves and installation of new stainless steel ring for improved sealing

- Refurbishment of draft tube upper part 2 and installation of new flange with two o-ring gloves for improved sealing
- Installation of new generator brake disks for Unit 1 & 3

Refurbishment work on Unit 1 started in June 2014 and was completed by end November 2014. The process took 6 weeks longer than initially planned due to technical delays experienced during dismantling, refurbishing and assembling the turbine. The unit was commissioned in December 2014 after five days of reliability testing.

Performance tests carried out after commissioning confirmed expected improvement with respect to power output (85 MW), efficiency of  $\pm 94\%$  and reduced vibration through the entire operating output ranges. The new turbine no longer required aeration to break down vortex flow in the draft tube and the resultant vibration. The elimination of the aeration compressor lowered the station auxiliary consumption by 400 kW. The noise levels in the power station were also lowered by removing the aeration compressor.

The refurbishment of Unit 3 commenced in May 2015 following a break between December and May, to allow for power generation during high flow season. The refurbishment was completed in four and a half months. The performance of Unit 3 also matched expectations. The delivery of part for the governor project was expedited to allow the upgrade to be carried out concurrently with PIV upgrade and runner replacement.

The refurbishment of the last unit, Unit 2, began in November 2015. The process went smoothly partly due to the learning gained during the refurbishment of Units 1 and 3. The assembling process was completed by in April. The refurbishment period for Unit 2 was slightly longer due to the December holiday and delays with the replacement of a defective James Walker shaft protection sleeve. The last unit, Unit 2, was commissioned on 24 July 2016. Similar to unit 1 and 3, the performance matched and even exceeded expectations with regard to vibration levels.

With the successful installation of the new runners at Ruacana Power Station, it was observed that there was huge improvement on the transmission network from a system stability point of view. They pointed out that the old runners caused inter machine swaying, that were very badly damped. The swaying, that originated from the old runners, were carried through the rotor and electrically caused swaying on the stator. This problem is no more with the new state of the art turbine runners.

The Ruacana Turbine Runner Refurbishment project was successfully carried out largely by NamPower staff from the power station, supported by staff from Generation Engineering Services, Finance, Stores and Procurement, NamPower Aviation and Fleet Management.

# Public Enterprises Minister visits NamPower

**P**ublic Enterprises Minister, Leon Jooste, paid a courtesy visit to NamPower earlier this year. The minister's delegation comprised of his Deputy Minister, Engel !Nawatiseb, and other high ranking officials in the ministry.

Jooste commended NamPower for being "a well-run institution", and described the company as a model and exemplary SOE that others SOE in the country can imitate. He alluded that the Ministry is moving towards performance based governance as practised globally, and that the ministry is working on having most policies and legal frameworks that govern state-owned entities, revised. These include new remunerative guidelines and new procurement policies, among others.

The minister called for greater cooperation between his ministry and NamPower, and all state owned enterprises at large, adding that solutions to challenges and growth cannot be found in isolation but through cooperation with the ministry.



*Public Enterprise Minister Hon Leon Jooste, NamPower Board Chairlady Maria Nakale and NamPower Managing Director, Kahenge Simson Haulofu*



*Public Enterprise Deputy Minister Hon Engel !Nawatiseb and NamPower Board Chairlady Maria Nakale with officials of NamPower and the Ministry*

# NamPower signs agreement with Greenam



*NamPower Managing Director Kahenge Simson Haulofu and Asaf Nadel of Greenam Electricity*

NamPower signed a 25-year power purchase and transmission connection agreements with Greenam Electricity in July, for the supply of 20MW of electricity. Greenam will be supplying NamPower with electricity from 2x 10 MW solar photovoltaic power plants that will be constructed at sites Kokerboom near Keetmanshoop and Hardap near Mariental. Discussions between Greenam and NamPower for this transaction began 8 years ago, before culminating into the signing of the agreement on 13 July 2016. The agreement is for a period of 25 years.

Greenam is an Independent Power Producer (IPP), mainly owned by Israeli multi-national investment company, FK Group, Asaf Nadel and some local (Namibian) partners. The FK Group's total equity investment into the solar project is between U\$ 35 million and U\$ 40 million.

Mindful of the continuing power supply shortage, NamPower initiated the Short Term Critical Supply Project (STCS) under which a number of short to medium term initiatives are being implemented to address immediate power supply challenges. Power purchase agreements, such as this one, form part of NamPower's STCS programme.

While working on base-load generation and transmission projects in an effort to meet the ever increasing demand for power, NamPower will continue to negotiate new PPAs with power utilities and IPPs in the country and elsewhere.

Speaking at the occasion, NamPower Managing Director, Kahenge Simson Haulofu, reiterated that NamPower is committed and open to working with IPPs that have viable renewable energy projects in order to complement conventional power generation sources with the aim to ensure that the goals and objectives of Vision 2030 are realised.

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## **SWITCH TO LED** **THE NATION'S BULB**

**I USE MUCH LESS ELECTRICITY**  
**I LAST MUCH LONGER**  
**I DON'T BREAK EASILY**  
**I AM KIND TO THE ENVIRONMENT**



# THE BULB

WASTE ENERGY,  
WASTE MONEY  
AND WHO CARES ABOUT  
THE ENVIRONMENT?

I'll waste your dollars | I'll easily blow my fuse  
You'll need to replace me more often | I'll waste a lot of energy

# NamPower's IEC 61850 and HVDC Test Labs



*Manager PTM&C Kavehuurua Tjuma*

Until 2013, NamPower's procedure for testing substation protection panels was to send its commissioning engineers to the manufacturer and conduct factory acceptance testing at their factory. Considering the amount of panels needed for NamPower's various substations across the country, this process proved to be time consuming and costly. Eventually, this predicament prompted the company to construct its own IEC 61850 and HVDC Test Labs. The test labs are situated at the NamPower Centre in Windhoek.

## **IEC 61850 Test Lab**

As far as NamPower's Protection and Automation philosophy is concerned, the company has implemented a protocol that deals with communication within and between substations, IEC 61850. IEC 61850 is the latest technology in substation communication, which allows Intelligent Electronic Devices (IEDs)/relays within substations to communicate with each other using an Ethernet network.

Now that NamPower houses its own test lab, the protection panels are now shipped straight to NamPower, where engineering work with regard to protection, automation and control logic is configured. Also, testing of protection functions such as transmission lines and transformer protection functions, is performed in the test lab to determine whether they function as per standard. Protection settings are decided by NamPower's System

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*“Eventually, this predicament prompted the company to construct its own IEC 61850 and HVDC Test Labs.”*

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Security and Planning Department and are tested by the PTM&C (Protection, Telecommunication, Metering and Control) commissioning engineers.

The lab testing allows for multiple panels to be tested at the same time, with the average time span required for one panel testing being about two weeks. Additional tests undertaken in the lab include Inter-bay communication using GOOSE messaging, SCADA signals (e.g. control signals sent from National Control) and equipment statuses (e.g. breaker opened/closed indications).

Signals sent between transmission lines are also tested in the lab by connecting fibre optics between relay panels and simulating the signals using test equipment. The test equipment used is OMICRON CMC 256, which can inject, test current or voltage into relays.

After all the tests are completed and the commissioning engineer is in approval of the results, the panels are transported to site for installation.

### **HVDC Test Lab**

The HVDC Test lab was set up to support the HVDC transmission network known as the Zambezi Link network, a 330 DC line that runs from Zambezi substation in Katima Mulilo to Gerus substation in Otjiwarongo with converter stations at both sub stations. To support the testing of the DC network, a test lab was set up where simulations are performed.

Simulations can be a DC or AC fault that is simulated to determine how the system would react in a real life situation. If there is a new logic to be implemented on the system, it is first tested in the lab by using simulation, and then it is decided if the results conform with what is required as per standard.

# NamPower launches 1mLED Campaign



*Managing Director of NamPower, Kahenge Simson Haulofu and the 1mLED Campaign Team*

NamPower has launched the 1mLED Campaign, an energy savings initiative aimed at reducing electricity usage in residential areas during peak times (06:00-09:00am and 18:00-21:00pm), by replacing one million incandescent bulbs with light emitting diode (LED) bulbs, for free. The campaign which was launched on 31 August 2016, is part of NamPower's efforts aimed at addressing the increasing demand for electricity in Namibia, that has now exceeded local supply.

The 1mLED Campaign is part of the short to medium term initiatives under NamPower's Short Term Critical Supply Project (STCS), implemented to address immediate power supply shortages.

Compared to incandescent bulbs, LED bulbs last longer and consume far less electricity, while giving out the same/or more light intensity. The bulbs are environmentally friendly as they contain

non-toxic substances and are very cost effective over a period of time.

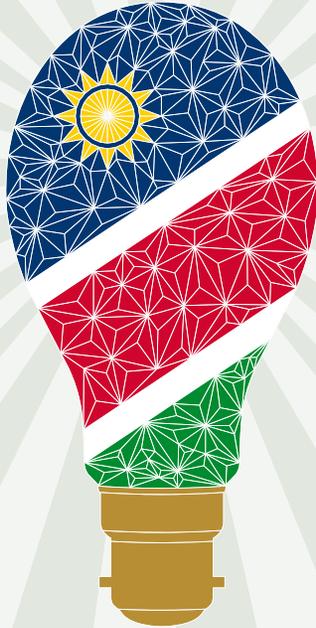
The bulbs to be replaced are those which are mostly switched on during peak times in areas such as the sitting/living area, kitchen, dining room, TV room and passages. The replacement of incandescent bulbs with LED bulbs is expected to reduce the peak demand by up to 30 MW.

In order to ensure the smooth implementation of the initiative, NamPower has contracted two companies that will be known as LED Champions, to facilitate the bulb installations process throughout the country. They are Lex Technologies and NamEnergy Resources. These LED Champions have recruited local people from the regions to do the house-to-house removing of the incandescent bulbs and installations of the LED bulbs.

Installation schedules will be advertised in the print media, highlighting when the installers will be visiting a certain town or suburb. Installers will carry Namibian and LED Campaign identity (ID) cards. The public is urged to always verify the authenticity of the installer before they enter your house. Before the installer replaces your old incandescent bulbs with free LED bulbs, homeowners or those at home during the visit, have to complete and sign the 1mLED Data Gathering Form.

If one of the LED bulbs fail within three years, homeowners can replace the bulbs at an exchange point in their towns for a new one, for free. The exchange points will also be advertised in the local media.

NAMPOWER  
**1mLED**  
CAMPAIGN



# SWITCH TO LED

## THE NATION'S BULB

SAVE Electricity, SAVE Money,  
SAVE the Environment

# “Thank You”, says Ingo Ahrens



Ingo Ahrens

In the spirit of celebrating NamPower's 20th anniversary, Watts On will be profiling long serving employees to honour them for their unwavering commitment to the company over the years.

At NamPower's 20 year anniversary staff celebration in July, 65 year old Ingo Ahrens

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*“There is truly no better company to work for than NamPower, and that is the sole reason why I stayed with the company for this long.”*

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received a roaring round of applause as he walked up to the stage to receive his 40-years of service award. The thunderous applause he received is testament to the warmth of his personality and the lives he's impacted during his four decades with the company.

Ingo began his career with SWAWEK in June 1976 as a 25-year old operator at Van Eck Power Station, the same place that he, unknown to him at the time, would be stationed at for the next 40 years. Ingo has served at the power station in various capacities including Fireman, Shift Supervisor, and operations superintendent, the position that he currently holds.

“When I started at SWAWEK, it was the time when all the power station operations were done manually. We would manually operate the boilers and turbines and as you can imagine, it was very labour intensive. I worked shifts for 25 years”. Ingo characterises this period as “one of his hardest periods at NamPower”, but he continues to say that despite the hard times, he has never once thought of leaving the company. “There is truly no better company to work for than NamPower, and that is the sole reason why I stayed with the company for this long.”

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*“NamPower has always created a conducive working environment for its employees.”*

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*Ingo receiving a Long Service Award from NamPower Managing Director, Kahenge Simson Haulofu*

“Throughout the years and regardless of the administrations, NamPower has always created a conducive working environment for its employees. The privileges we receive from the company, even decades ago, are not comparable to any other company in the country. This is something that I will always be grateful for, and will miss.”

Now in his retirement, Ingo encourages his fellow colleagues to continue working hard to carry the company forward for many more years to come. Ingo’s last day of service with NamPower was 31

August 2016. Upon retirement, he plans to travel the Kavango and Kunene Regions with his wife of 45 years, Hannitjie.

NamPower attributes its success and longevity to its dedicated employees, who all with their unique skills, are the engines that drive this company forward. NamPower honours Ingo Ahrens for his steadfast commitment to serving the company for 40 years and wishes him abundant health and joy on his well-deserved retirement.

# NamPower Foundation supports Medic Rush 2016



*Hochland Roundtable Medic Rush 2016*

The NamPower Foundation once again partnered with Hochland Round Table 154 in support of Medic Rush, an annual initiative that sees health care practitioners offer free medication and health care services to communities in remote and less privileged parts of the country.

The medic rush took place from 5 – 7 May 2016. A team of doctors visited clinics at Omatjete, Anixab and the Tweyfelfontein Constituency Office, treating a total of 538 people.

The NamPower Foundation has supported the Medic Rush consecutively for the past 5 years, and contributed N\$ 150 000,00 towards this year's program.

## NamPower Ladies pledge towards to Sani Care Project



*NamPower Senior Wellness Officer Julinda Gomaxas and Hilda Basson-Namundjebo*

During International Women's Day, celebrated earlier this year, the NamPower ladies, motivated by the Women's Day days theme "Pledging for Parity", pledged to donate sanitary pads to the Sani Care Project.

The Sani Care project is a nationwide initiative founded and headed by Hilda Basson-Namundjebo. The project collects and distributes sanitary pads to school-going girls across the country. Many under privileged girls across the country do not attend school during their menstrual cycle as they cannot afford to buy sanitary pads. This amounts to about 5 days of absenteeism from school every month. What seems like a basic necessity is sadly considered a luxury for others. The Sani Care Project travels to remote areas and distributes the donated sanitary pads.

NamPower's ladies donated N\$ 10 000 worth of sanitary pads to the project and have further vowed to keep the initiative running by donating a packet of pads monthly.

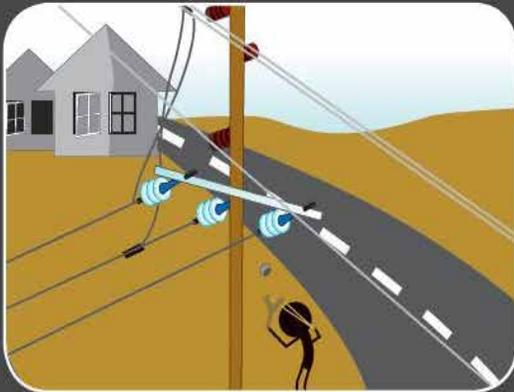
# THE POWER OF KNOWING

About Safety & Electricity



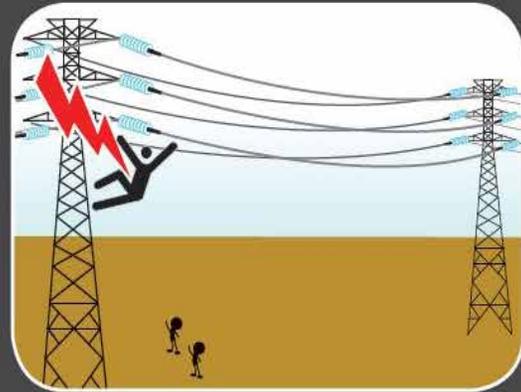
*Powering the Nation and beyond*

## Vandalising of Power Structures



Vandalising of power structures can cause power outages in the country. It is also illegal and punishable by law.

## Touching of Electrical Structures is Dangerous



Always regard power lines as "live" and avoid coming close to, or touching any part of a live electrical apparatus. It is dangerous and can cause loss of life through electrocution.

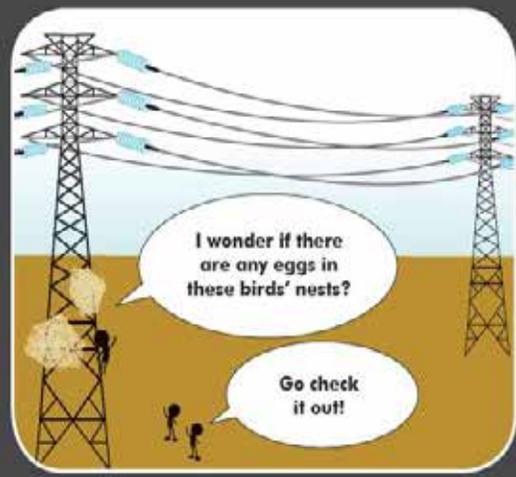
[www.nampower.com.na](http://www.nampower.com.na)



# THE POWER OF KNOWING

## About Safety & Electricity

### Playing and Climbing on Power Structures



It is dangerous to climb or play with electricity structures. It can cause death by electrocution.

### Building Under Power Lines



It is dangerous to erect dwellings under or near electrical power lines.

[www.nampower.com.na](http://www.nampower.com.na)

# Dealing with Workplace Stress



While some workplace stress is normal, excessive stress can interfere with your productivity and performance - and impact your physical and emotional health.

Stress isn't always bad. Stress within your comfort zone can help you stay focused, energetic, and able to meet new challenges in the workplace. When stress exceeds your comfort zone, it stops being helpful and can start causing major damage to your mind and body as well as your job satisfaction. Whatever your work demands or ambitions, there are steps you can take to protect yourself from the damaging effects of stress and improve your job satisfaction.

When you feel overwhelmed at work, you lose confidence and may become angry, irritable, or withdrawn. Other signs and symptoms of excessive stress at work include:

- Feeling anxious, irritable, or depressed
- Apathy, loss of interest in work
- Problems sleeping
- Fatigue
- Trouble concentrating
- Muscle tension or headaches
- Stomach problems
- Social withdrawal
- Loss of sex drive
- Using alcohol or drugs to cope

Ways to cope with stress in the workplace:

## 1. Build positive relationships

Develop a friendship with a colleague. Sharing your thoughts and feelings with another person can help reduce stress. Talking about a problem with someone who is both supportive and empathetic can be a great way to let off steam and help you become calm and focused.

## 2. Exercise

Regular exercise is a powerful stress reliever. Join a gym or enroll in an extra-mural activity. When stress is mounting at work, try to take a quick break and move away from the stressful situation. Take a stroll outside the workplace if possible. Physical movement can help you regain your balance.

## 3. Eat well

Your food choices can have a huge impact on how you feel during the work day. Eating small, frequent and healthy meals, for example, can help

your body maintain an even level of blood sugar, keeping your energy and focus up, and avoiding mood swings. Low blood sugar, on the other hand, can make you feel anxious and irritable, while eating too much can make you lethargic.

#### **4. Get enough sleep**

Not only can stress and worry cause insomnia, but a lack of sleep can leave you vulnerable to even more stress. When you're well-rested, it's much easier to keep your emotional balance, a key factor in coping with job and workplace stress.

#### **5. Prioritize**

Prioritize tasks. Tackle high-priority tasks first. If you have something particularly unpleasant to do, get it over with early. The rest of your day will be more pleasant as a result. Break projects into small steps. If a large project seems overwhelming, focus on one manageable step at a time, rather than taking on everything at once. Delegate responsibility. You don't have to do it all yourself. Let go of the desire to control every little step. You'll be letting go of unnecessary stress in the process.

#### **6. Break bad habits**

Resist perfectionism. When you set unrealistic goals for yourself, you're setting yourself up to fail. Aim to do your best, no one can ask for more than that. Flip your negative thinking. Try to think positively about your work, avoid negative-thinking co-workers, and pat yourself on the back about small accomplishments, even if no one else does.

Don't try to control the uncontrollable. Many things at work are beyond our control—particularly the behavior of other people. Rather than stressing out over them, focus on the things you can control such as the way you choose to react to problems.

*Source: Helpguide.org*

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*“When you arise in the morning, think of what a precious privilege it is to be alive—to breathe, to think, to enjoy, to love.”*

*--Marcus Aurelius--*

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# Snaps taken at NamPower's 20 Year anniversary celebrations in Windhoek, Rehoboth, Gobabis and Keetmanshoop







*Powering the Nation and beyond*

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