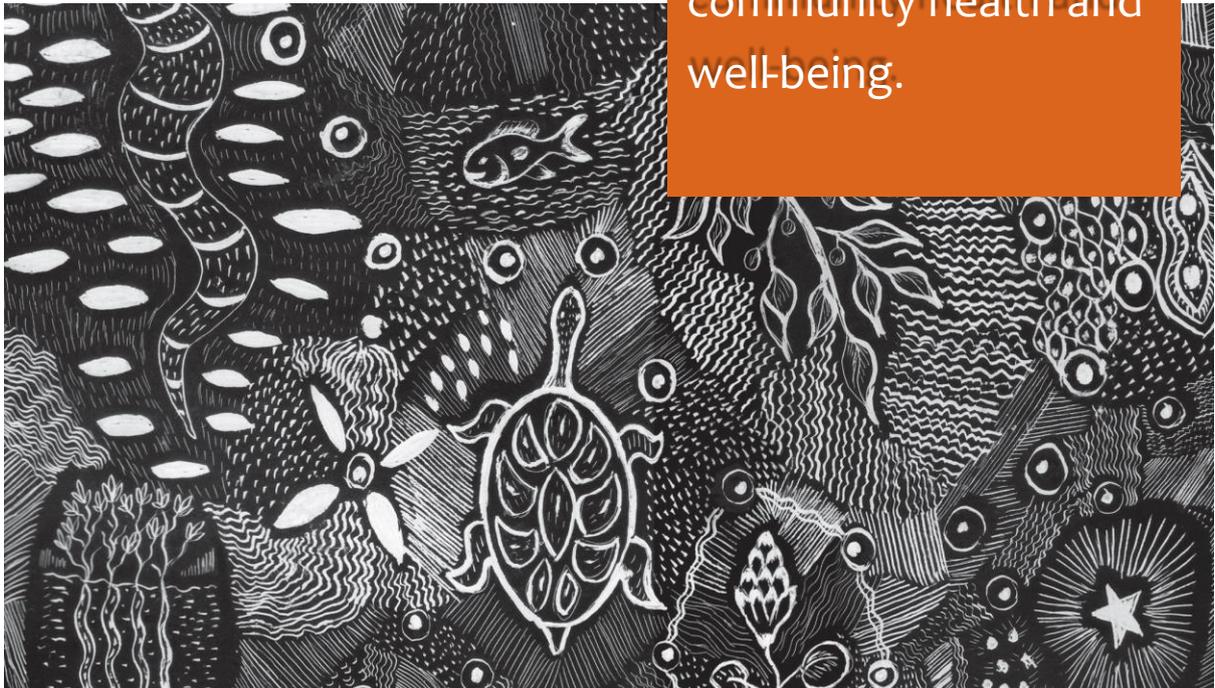


Project Report:

Power usage in the  
Bidyadanga community  
and its relationship to  
community health and  
well-being.



'Seeing Country' by Nyapuru Laurel

November 2016

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Photo of Bidyadanga beach sand with bird footprints (Anna Dwyer).

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In this document, the following abbreviations apply:

Bidyadanga Aboriginal Community Lagrange Inc. (BACLGI)

Karajarri Traditional Lands Association (KTLA)

## Executive Summary

Based on a review of literature, interviews with a representative sample of Bidyadanga community members and the Principal Author's assessment of the current situation with respect to power usage in the Bidyadanga community and its relationship to health and wellbeing, this study found:

- A lack of appropriate or effective communication from the service providers to community members regarding changes to electricity supply systems;
- Regular transitioning of systems causing difficulty and confusion;
- Impact of difficulty in understanding, using or paying for electricity supply causing or compounding people's health and well-being negatively, such as stress;
- Overwhelming support for the old power card system, the AMPY<sup>1</sup> pre-payment meters (PPM) system;
- Cultural practices still in place in contemporary society, but not considered when designing utility supply systems.

This preliminary research shows that when the electricity models changed, this was not easily accepted by people living in Bidyadanga community. The key findings of this project are that electricity billing systems caused additional stress to people due to cultural obligations, causing community conflict and shame, and cultural stress. There was also a lack of effective communication about changing systems, which caused confusion. People do not feel any sense of ownership and control of the decisions being made in their community about their power supply. Community education is needed to address these situations and this should include money management and financial literacy.

The inability of Horizon Power to work closely with the community and explain the major changes to electricity systems in culturally appropriate ways in plain English, and in language appropriate to the diverse linguistic community of Bidyadanga (for example, using an interpreter), may have contributed to some difficulty and confusion. Tension between the community and the Bidyadanga Aboriginal Community La Grange Inc. (BACLGI) and the Karajarri Traditional Lands Association (KTLA) around such matters could be avoided.

Horizon Power, in line with its customer service charter (HP 2016a) and Aboriginal community engagement (HP 2016b) could revisit the community to help people still struggling with these changes. Working with linguists and interpreters will be necessary to ensure communication methods accommodate the diverse linguistic and socio-economic background of the community.

We recommend that Horizon Power and other government agencies work with BACLGI and the KTLA for future planning especially concerning affordability and sustainability with the different models of electricity supply (see Key findings and recommendations).

The people of Bidyadanga want their voices to be heard as they are the people living in the communities. It is necessary for Horizon Power to work closely with communities and develop service delivery that suit the cultural systems. In Bidyadanga, this is an Aboriginal community with a collaborative ethic and co-operative cultural practices that need to be listened to respectfully. This is also likely to be relevant to other remote Aboriginal communities as well.

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<sup>1</sup> AMPY is a brand of pre-payment metre.

The people in remote communities know they have to pay for their electricity, water and rent. A solution needs to be found by working with the people from Bidyadanga. The people in Bidyadanga recognise their children are important and deserve a bright future, which includes their ability to understand and make good decisions about their prospects, including attitudes to electricity and technology use for generations to come.

The following recommendations are provided in response to the key findings from this study.

- Recommendation 1: Service providers aim to work from the ground up and partner with the community in service delivery.
- Recommendation 2: BACGLI and KTLA establish a participatory planning process for the community to determine preferred models of electricity supply, including alternative systems such as Renewable Energy options that have been successful in outstations.
- Recommendation 3: Establish a service provider support service in Bidyadanga, where people can pay bills and access support across all utilities/services and financial literacy.
- Recommendation 4: Improve communication between service providers and the community; as a first step BACGLI invite Horizon Power to revisit Bidyadanga and provide culturally appropriate information sessions and simple plain English or pictorial information packs.

## Introduction

In a short period of time the people of Bidyadanga have experienced major changes as a consequence of the fast growing population of the community and government approaches to ‘mainstreaming’<sup>2</sup> service delivery, especially around electricity supply systems and the different ways households’ access power. This preliminary research project explores the social and cultural impacts of recent changes to electricity supply systems in place in Bidyadanga community, Western Australia. Changes to electricity systems are analysed through investigation of qualitative data collected in this study by the principal researcher and cultural advisor, interpreter and a Karajarri woman. The idea was to understand the impacts frequent transition may have on community people.

This preliminary study came about after noticing the problems that arose from the changes to community infrastructure and basic services experienced by Bidyadanga and outstation residents. The principal researcher observed these problems and impacts directly on community members through many different situations (for example, frequent disconnections in electricity, and unsafe extension cords being run between houses when family members were unable to pay large power bills). This topic was often raised formally while conducting interviews for a previous research project (see Dwyer 2016); and informally, unprompted through conversations with community members in social settings, such as out fishing, camping or catching up with people in the community or outstations. The most common theme of these discussions was a lack of understanding of why the changes were made. Following that, earlier research (see Dwyer 2016) identified renewable energy as an alternative and preferred system, the provision and billing of electricity became the impetus for this study.

The research project will contribute to a gap in the literature by bringing forward the voices, experiences and opinions of a representative sample of Aboriginal people about energy provision in their community. This is especially important in the current policy environment to understand

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<sup>2</sup> Mainstreaming means providing the same services in the same way to all citizens irrespective of differences of need, desire, geography, land tenure or socioeconomic status.

the impacts and cultural context of ‘mainstreaming’ of Aboriginal essential services and provides insight into how this impacts well-being at individual, household and community levels for Bidyadanga residents. This study will identify possible improvements for communication and education in the community, and provides recommendations for future relationships with service providers.

Although this case study is focused on the Bidyadanga community in the southern Kimberley region, it can inform discussion on service delivery for other remote Aboriginal communities across the region and in a broader context in Australia. Being a preliminary study based on a representative sample of service users, it is not attempting to provide definitive findings with respect to majority views of members of the Bidyadanga Community. However, in discussing the ongoing project and reporting the results of the research to community representative bodies, these representative views have been discussed with appropriate community cultural and political authority structures and considered to hold substance.

Even though this report is focused on the mainstreaming of electricity supply to one of the largest Aboriginal communities in the Kimberley, the issues that are raised and examined here also relate to current Western Australian and Federal Government policies aimed at mainstreaming all services delivered to remote Aboriginal Western Australians.

## Background and Context

### ***Bidyadanga community profile***

Bidyadanga has an estimated population of around 700-800 people. It is located on *Karajarri-kura ngurra*, traditional Karajarri Country<sup>3</sup>, in the south-west Kimberley region. The Karajarri people of the south-west Kimberley region comprise three related language groups speaking slightly different dialects from the *Nangu-Karajarri*, from the north-east, the *Nawurtu-Karajarri* from the desert south-east and with the *Naja -Karajarri* saltwater people along the coastal region. The closest town is 200 kilometres to the north. In the 1950’s Karajarri people welcomed many neighbouring desert and coastal people to live ‘as one’ on Karajarri Country and became established initially through the presence of the La Grange Catholic Mission from the mid-1950s up to 1974 (Weir 2011; Dwyer 2012). These people are the *Mangala*, *Juwaliny*, *Yulparija* and *Nyangumarta* People. In 2011, of the total population of 600, 160 regarded themselves as Karajarri people (Edgar 2011). Bidyadanga population numbers have since grown but Karajarri remain a minority in their own Country.

The history of the community has seen a number of overlapping governance systems: Karajarri traditional owners and their representative structure for Native Title, the KTLA; the Bidyadanga community administration through the BACGLI; and, state and Commonwealth government programs, resources, legislation and administrative requirements.

Similar to many Kimberley Aboriginal communities, average income for Bidyadanga residents is low, with a median weekly income in 2011 of \$266 per individual and \$909 for the total household (ABS 2012). Unemployment was also higher than the national average at 15.4% in 2011 (including Community Development Employment Program (CDEP) participants) (ABS 2012). There was also a high degree of welfare dependency, especially since the closing down of CDEP in 2014 when 230

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<sup>3</sup> ‘Country’ is capitalised to denote respect and acknowledge its living spirit and lands.

positions were lost in Bidyadanga, with little opportunity for new employment directly within the community (Willing 2014).

Census 2011 data shows 103 households in Bidyadanga and indicates some overcrowding with 5.6 persons per household (ABS 2012). Overcrowding can lead to negative impacts that include psychological stress, lack of personal living space, inability to maintain privacy, and inadequate access to kitchen facilities and a bathroom (ABS 2012; McKenzie 2013).

Both the 2006 and 2011 Census data shows mainstream education levels are low for the Bidyadanga population (ABS 2008; ABS 2012). In 2006 only 17% of the population had completed high school compared to 40% for Indigenous people nationally in 2006 (Wilson, K., and Wilks, J. 2014), and 12 people in the age group 15-19 were in full-time education (Willing 2014).

Bidyadanga's health profile includes high rates of diabetes, heart and renal problems (Willing 2014). The health status of the Aboriginal people in the Kimberley is determined by many factors including the physical living environment, family social circumstances, life choices and risky patterns of behaviour (KAHPF 2012). There is a strong link between early-life environment and developing adult chronic disease (KAHPF 2012).

The Kimberley Aboriginal population is growing rapidly with an average increase of 2% per year (Department of Health 2009). The Bidyadanga population has grown very rapidly in the past 20 years and it is expected that the community will continue to experience constant growth in the future (Dwyer 2012), in line with predictions that the Kimberley is expected to be the fastest growing region in Western Australia over the next decade (DPI 2005).

Electricity, gas and water are essential for a minimum standard of living for all people. Indigenous households already face disadvantage across a range of socio-economic indicators including health, housing, income and education, and those Indigenous households in regional and remote areas are burdened with higher energy costs due to a range of structural (e.g. weather, high cost of goods and services, poor quality housing, fixed high energy use appliances) and socio-economic factors (e.g. overcrowding, family structure and mobility, low income households) (McKenzie 2013, p6). These negative impacts together suggest Indigenous people living in remote communities are at particular risk of negative health and social effects due to rising energy costs and poor reliability of supply.

Service providers to Bidyadanga community, such as power and other services, are responsible for maintenance, communication and upgrades to their systems. BACGLI have an important communication role between community and service providers. The BACGLI role is to advise government departments or service providers when there are issues or faults and those service providers are responsible for any action (Baxter, pers. comm.).

The community includes the following organisations and services such as;

- The KTLA and BACGLI offices where formal decision making bodies administer and manage Karajarri Country and the Bidyadanga Community, respectively;
- Nyangumarta Rangers office;
- Community Service Resource Centre which comprises the telecentre, conference room and Community library;
- Government services such as the police station, sub-offices for WA Department of Housing, WA Department for Child Protection and Family Support and Centrelink;
- Health Clinic (not for profit) managed by Kimberley Aboriginal Medical Service (KAMSC),

- Kullarri Regional Communities Indigenous Corporation (KRCIC);
- BRACS Radio Station (Broadcasting for Remote Aboriginal Communities Scheme) (not for profit);
- Bidyadanga Fire Station;
- Bidyadanga Community Care;
- General Store and Takeaway, Municipal Service;
- Petrol station;
- LaGrange Remote Community School - Primary and Secondary School;
- Recreation and Sporting - Swimming pool, youth centre, arts and craft centre;
- St. John the Baptist Catholic Church, Assembly of God and Forward in Faith Church.

### ***Electricity supply systems in Bidyadanga***

In a short period of time, community members in Bidyadanga have experienced several major changes in models of power delivery and access. In less than a generation, power delivery and payment methods have changed from CDEP ‘chuck-in’ to prepayment meters (PPM) in each household, to some new households being issued monthly bills. A summary of the changes is presented in Appendix 1.

The ‘chuck-in’ system for the community used to operate through CDEP, where money was taken out of participants’ entitlements to pay for power and rent. This system was manageable for the people living in the community, and people interviewed remember it as giving them a good ‘quality of life’. However, as the community population grew and with the eventual closing down of CDEP in 2009, the community transitioned to an alternative supply and payment systems for services.

Horizon Power is currently the only available electricity retailer to Bidyadanga community, although Bushlight provide renewable energy systems to some outstation communities nearby. Around 2007 the Bidyadanga community began utilising Horizon Power mains electricity, via prepayment meters (PPM) installed in their households. A PPM is an electricity meter where the customer purchases electricity credits from external outlets (such as a community store) which is then transferred into the electricity meter – electricity can be consumed up to the amount of credit purchased. If the amount of credit is exhausted, the PPM discontinues the supply of electricity, which is reconnected when credit is reloaded into the PPM. This system also had an emergency credit function that enabled a small amount of electricity to be available (\$5-\$10) which was repaid when the next card is loaded.

The PPM displays the amount of credit available, time of use information and reminders to the consumer of when credit is running low, but did not have any ability to record or provide feedback to the user on electricity use (SECA 2008). These PPM systems in Bidyadanga initially used the AMPY Magnetic Card Operated Prepayment Meters (ECCC 2009) and then a transition to keypad operating systems were introduced in 2015, with associated changes as required under new legislation.

These most recent changes have been in response to amendments to the *WA Code of Conduct for the Supply of Electricity to Small Use Customers* (the Code), requiring new PPM systems in all Aboriginal communities to comply with the new Code. The Code controls the conduct of Western Australian retailers, distributors and electricity marketing agents to protect the interests of customers with little or no market power, such as Aboriginal communities. The regulatory framework governing PPMs varies between the different Australian states and territories.

PPM are the main method of electricity billing in Indigenous communities in the Northern Territory, Queensland and Western Australia (McKenzie 2013). Studies on the use of PPM systems note a high level of satisfaction with the PPM system in Australia and internationally (EWON 2014). A pilot survey of PPM use in six Aboriginal communities in the Kimberley reported a very high preference for PPM system over post-paid billing (93.2%), with 36 / 37 households in Bidyadanga preferring the PPM system (SECA 2008).

However, investigations into energy equity and efficiency, and the use of PPM systems in remote Aboriginal communities, highlighted some issues with existing PPM. These included the high cost of electricity use (McKenzie 2013), high frequency and duration of disconnections, and inability to access concessions and rebates (ACG 2009; McKenzie 2013). McKenzie (2013) also noted a poor understanding of energy efficiency to manage household energy consumption. The PPM system does not allow for “*monitoring disconnections and the effect disconnections have on adequate consumer protection*” (SECA 2008).

Aboriginal communities and town reserves historically have not had the same standards of municipal and utility services, including electricity affordability and supply. The Aboriginal and Remote Communities Power Supply Program (ARCPSP) is a joint project between Horizon Power and the Office of Energy. It was funded by the WA and Commonwealth Governments to improve the quality and reliability of supply of electricity to Aboriginal and remote communities, and redress some inequality issues by enabling access to a State-wide uniform tariff and government concessions and rebates (ACG 2009). Bidyadanga community was part of Phase 1 of the project and along with five other communities was ‘regularised’ by the end of 2007 (ACG 2009).

Part of this reform included making Horizon Power responsible for electricity distribution to individual premises within each community; and the installation of electricity meters at each premise (ACG 2009). This removed the ‘chuck in’ system in Bidyadanga where the electricity is supplied to a single master meter which the community then distributes and recovers costs via CDEP payment. Under the ‘chuck in’ system households were not eligible for any government concessions and rebates (ACG 2009). With the direct supply of electricity to Bidyadanga households, customers are now eligible to receive government concessions and rebates (where eligibility criteria are met). The initial pilot roll-out of the Ready Power Card PPM technology in remote WA communities in 2008 included Bidyadanga as one of the six communities involved in the pilot (SECA 2008).

In 2010 the Economic Regulation Authority amended Part 9 and Part 13 of the *Code of Conduct for the Supply of Electricity to Small Use Customers* (the Code) in relation to the operation of PPM in Western Australia (ECCC 2010). The amendments were aimed at addressing the customer protection issues raised in a review of PPM (ACG 2009) as well as “*providing a level of protection commensurate with other jurisdictions and in line with the proposed national regime*” (ERA 2010, p5).

This change resulted in upgrading of the PPM and new keypad credit systems, which occurred in Bidyadanga in 2015. Customers purchase any amount of electricity at the local store, and are given a receipt with a unique number that is entered manually into the keypad of the smart meter. The new PPM systems have enhanced functionality which enables tracking of consumption at regular (hourly or less) intervals and enables monitoring of consumption, disconnection and billing to be recorded, to comply with the new Code (McKenzie 2013). Smart meters do not have any emergency credit function, but there are set times when disconnection cannot occur, such as on weekends or after 3pm when the local store is closed, to minimise disconnection and associated hardship or health risk situations.

In 2007, an Indigenous Land Use Agreement (ILUA) was initiated between the State government, the native title holders and the community council (Weir 2011). Under this ILUA 16 new houses were built in 2012- 2013. At that time the majority of houses in the community were using the prepaid systems rather than the account paper billing system. Horizon Power gave tenants in the new houses the option of having an account system or prepaid meter system installed in these houses.

## Aims

This research project set out to explore the experiences of Bidyadanga community members of different models of power provision and billing over the past 25 years. It also explores how different models complement or conflict with cultural practices of demand sharing with family.

## Methodology

A qualitative research approach was applied in this study: data collection involved semi-structured face to-face interviews with Bidyadanga community residents; and a literature review of relevant academic and industry sources.

The principal researcher also supplemented the approach with a methodology known as autoethnography (Ellis *et al* 2010). Auto-ethnography is a form of inquiry whereby the autobiographic materials of the researcher are utilised as a primary data source. As a Karajarri woman and Traditional Owner, with considerable responsibilities to Country, my personal reflections on the matter of the different types of electricity models supplied in Bidyadanga are also a part of the story to be told (Dwyer 2016).

The methodological approach was in accordance with the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) Guidelines for Ethical Research in Indigenous Studies, and was approved by the University of Notre Dame Human Research Ethics Committee (HREC) on 9<sup>th</sup> November, 2015.

## Interviews

Semi-structured interviews were conducted with 12 household representatives between May (7 interviews), June (5 interviews) and in July (1 interview) 2016. All interviews were conducted by the principal researcher who worked in the community for two weeks. The interviews were undertaken in a mixture of Karajarri, Kriol and plain English to enable community members to be at ease and be understood, and to draw out real life stories of community members in their own words. One interview had a non-Aboriginal researcher present. In most cases interviews were with individuals, but some of the interviews were undertaken with other family present and contributing to the discussion (groups of 2-3 people).

The principal researcher used cultural knowledge and language, to ask Traditional Owners and community members about the challenges around the different types of models supplied in each household in the community. A presentation was given to the KTLA and to BACLGI to introduce the study.

Participants were chosen from within the Bidyadanga community to ensure a diversity of backgrounds (purposeful sampling) and experience with power systems. Participants from four language groups (Mangala, Juwaliny, Yulparija, Karajarri), and both men and women were included. About two-thirds of the participants overall were women, and included both PPM and post-paid billing system customers, as well as Bushlight customers from the outstations near Bidyadanga. Interviews were extended to include BACLGI staff to gain further insight into issues that arose through community interviews. Of the total number of people interviewed ten were

women and three men, and the majority of participants were Aboriginal with only two participants identifying as non-Aboriginal.

Interview questions were developed by the principal researcher who has contact with the community and familiarity with the issues, as well as input from a team of Nulungu researchers. Two interview questionnaires were developed (Appendix 2): the first is the version of questions which was submitted to HREC and during the project, further adapted to produce the second version, which 'translates' the first into non-academic English for local use in Bidyadanga, so that people could read the questions themselves and ask about them before the interview started. Both questionnaires were utilised for interviews.

Interview questions focused on changes to electricity delivery over time and any associated impacts. A semi-structured approach was used to accommodate various languages/cultural protocols and enable the researcher to delve deeper into issues and further understand community perspectives. All participants were given a copy of the Information Sheet and consent documents, and these were also read to them and consent forms signed and retained.

Interview responses were recorded on paper by the principal researcher. Recorded interviews were outsourced for data transcription, which were all subsequently rechecked and edited by the principal researcher. Thematic analysis of the interview transcripts was undertaken using NVivo qualitative data analysis software.

### ***Desktop research and literature review***

A comprehensive literature review of academic literature, publicly available reports, policy documents, website information and relevant industry sources was undertaken to provide background information and support findings from the interview data. The focus of the literature review was informed by the data gathered from the interviews, with interrogation narrowed to the following areas of electricity delivery in remote Aboriginal communities:

- pre-payment meter use and post-payment billing systems;
- communication of changes to existing systems and impacts of inadequate communication;
- description of Bidyadanga community and cultural context;
- cultural issues or impacts;
- any related health and well-being impacts;
- alternative energy systems for remote communities;
- relevant sustainability and climate change issues;
- Comparison of the Bidyadanga experience of energy supply in relation to other similar remote Aboriginal communities in Australia and internationally.

The literature review informs this study by providing additional background and context to the issues raised through data collection, and it also contextualises Aboriginal people's lived experiences of service delivery in remote communities.

## **Results**

The following themes emerged from the thematic analysis of interview data, grouped in three major categories:

1. Community conflict
  - 1.1. Cultural obligations
  - 1.2. Shame and cultural stress
2. Communication and awareness

- 2.1. Communicating changes
- 2.2. Ownership and control
- 2.3. Community education
- 3. Managing finances
  - 3.1. Money management
  - 3.2. Financial literacy

## Discussion

This section describes the findings of the research project – both the thematic analysis from the data collected and literature review - with respect to social and cultural impacts from changes to the power supply system in Bidadanga. It is also informed by the principal researcher’s own reflections using auto-ethnographic analysis to contextualise and explain the research findings. The analysis of findings is grouped under the three main themes identified: *Community Conflict*, *Communication and awareness*, and *Managing finances*.

### 1. Community conflict

#### 1.1 Cultural obligations

As identified earlier, in Bidadanga there are five language groups permanently living in the community; *Karajarri*, *Mangala*, *Juwaliny*, *Yulparija* and *Nyangumarta* people. The *Karajarri* people as native title holders, are responsible to look after the other language groups in the Bidadanga community who are living on *Karajarri Country*. These family groups have been sharing the cost of living for at least 40,000 years, based in lore and culture. The cultural practices that people are engaged in help them to organise themselves in the Bidadanga community and throughout the Kimberley. These practices made sure that people were supported and resources were shared, and they are still used today, every day, in community life.

*It depends on what week you get your wangku (money) you see. If we don't have wangku, we get a loan from family members or they help us pay for power in that week. When you don't have wangku and when your time for payday you repay them. It goes around in circle with family. (Community interviewee, 2016)*

*My family share with me, I pay the power card and so does my Mum, brothers and sisters help me. (Community interviewee, 2016)*

Resource sharing as a means of maintaining electricity supply, such as borrowing a power card from another family member or household, has been reported in another study that included the Bidadanga community (SECA 2008).

Traditional Owners feel it is their obligation to share costs because this closely follows their connection to and relationship with *Country*, kinship systems, customs, thoughts, behaviours, and different communication styles. Cultural obligation works when people are able to understand how they will support each other and their responsibilities within that system. When one or a number of individuals or families don't understand, or get into trouble with the *kartiya* (non-indigenous) system, individuals often seek support culturally and community members are obligated to help them. The continual or additional requests/obligation creates stress on the cultural system and people can end up getting into difficulties through both systems even though they are trying to do the right thing by the *Kartiya* (non-indigenous) and the *Ngarrangu* (Aboriginal people) system.

In Aboriginal communities where everyone lives close together and knows each other, and it is difficult to maintain privacy, stresses and pressures can be dealt with in a different way to mainstream society where the problem stays within that one household, isolated and private. In Bidyadanga, as in many other communities, when people are facing hardship or difficulties this can create shame within the community and create additional stresses and pressures. Sometimes it is hard for the individual householders to ask for financial help from those in particular kinship relationships who are staying with them. In some circumstances it is culturally inappropriate; for example for a young woman to ask her mother/father-in-law for assistance and vice versa.

Karajarri and community people are learning to adapt to the different changes in day to day life, including electricity supply systems, in Bidyadanga. People know that they have to pay for rent and electricity, and are adjusting to the new systems. However, they still remain within a cultural system and carry on Aboriginal law and culture. People are adapting to contemporary ways of living, so they are getting used to balancing cultural ways with managing their everyday life in the community.

Family is also a major source of strength and a factor in defining identity and a sense of connectedness to kinship and culture (TICHR 2006). The ways in which families operate can help children establish positive coping mechanisms to deal with disadvantage, adverse life experiences and stress (TICHR 2006), which unfortunately are features of the current health and well-being profile for the Kimberley (KAHPF 2012).

### **1.2 Shame and cultural stress**

In the past people lived 'as one' and there is an intention that people will continue to live as one on Karajarri Country. That means they will continue to make decisions in the interests of each group in a collaborative way through the BACLGI and the KTLA.

In the past, people paid their bills through a 'chuck-in' system for the community (through CDEP), and people never had to be concerned about paying for electricity individually. At the time, this system was manageable for the people living in the community and people interviewed remember it as an easier way to pay bills and not causing so much worry. The CDEP system ceased in 2009, and the population has also increased since that time, requiring new solutions for infrastructure and utility services.

*... Years ago people used to pay in the office the money in a chuck in system, that's before Horizon Power. It used to come out of their rent. I remember that. They paid extra rent for their power before. I think the rent was the power paid from the rent money as well. I think that was how it used to work and it was low cost. Yeah and they would take the rent and the power in one bill. And they didn't have to worry about to pay for the bills in those days...*

(Community interviewee, 2016)

The Traditional Owners and other language groups always shared because it was their obligation to do so, whether it was their language, cultural sensitivity, stories, cultural practices and knowledge about Country. Community people remember earlier days as very happy and without stress from day to day living arrangements. They saved a little money and planned for their holidays or travelled to other communities to attend funeral and ceremony. They could afford to do this, because families shared costs when they planned to leave the community and they didn't have big bills, so they could pool their small incomes together and make do. Such a system of sharing is comfortable and normal, and acts like a safety net, where everyone is supported and carried along by everyone else.

In recent years things have changed for the people in Bidyadanga, especially the way utilities are provided and paid for, including electricity payment systems. Changing from the 'chuck-in' to individual household responsibility for power has led to changes to cultural practices, for example, people having to ask for money from other families to make ends meet, and the shame it brings to families saying 'no' to another family member. In some cases, where households have no funds to pay for power, or supply has been disconnected, power cords are strung up between houses to 'borrow' electricity, or a family allows other families to move into their homes when the power is cut off leading to overcrowding. Sometimes individuals become withdrawn in ones *Ngarlu* because people suffer physical, mental and emotional stress, especially when they are in financial or cultural stress. *Ngarlu* is a Karajarri term for defining the place of the inner spirit. This place in our stomach is the Centre of our emotions and wellbeing (Roe, 2010).

Living under two cultural systems – Aboriginal and mainstream – and where mainstream approaches do not support or place stress on the cultural system, can erode the cultural system. The sharing system obligation in Bidyadanga and cultural respect may be diminishing slowly because people feel that the system is not mutual anymore. This can become stressful for families living in Bidyadanga having difficulty with mainstream systems but unable to find a solution through the cultural system. Sometimes the financial or cultural stresses associated with these changes in the community can cause families to have arguments with other families, or even lead to marriage breakup, and domestic violence (Principal author observations).

*Sometime sharing cost can be stressful for a family member especially when it is time to ask for money when they cannot afford to pay their power bill. (Community interviewee, 2016)*

When community people lived in a shared way they didn't know how to pay for bills or manage money as individual households as there was no need to act in this way. The CDEP 'chuck in' system was a common system that operated across the Kimberley, so if people moved to another community, as people periodically do for family, work or cultural reasons, the uniformity of the system meant there were no difficulties in meeting shared bills. However, with the advent of different systems operating across different communities, if people leave to go to another town or community with a different system, they can find it very difficult to understand how to fit in and pay for bills and there are few opportunities for them to learn about these new systems to maintain a good life.

As mentioned above, Horizon Power's system now treats people only as individuals. It doesn't take into account cultural obligations of old people to take care of grand children or to provide shelter to family members who are mobile. Sercombe (2005) found that Indigenous people use a range of strategies to operate in both the mainstream and Indigenous cultures in successful ways. He suggests that the Indigenous and mainstream economies "... sometimes reinforce each other but are more often in conflict, and management of conflicting obligations requires high degrees of skill and innovation." (p1), which the results of this study support. For example, once people got used to how it worked, the PPM system could be utilised in a way that supported cultural sharing systems: visiting relatives could buy a power card for the household and it was also clear how much power they were using at that time. The PPM systems have the advantage of spreading the responsibility for paying for electricity across the family, or anyone else who might be staying in the house from time to time.

These systems allow greater flexibility for people to contribute money when they can, and for some sharing of the financial load across family. Paper bills make this more difficult as the bill may arrive months after relatives have left, and there is no way at the time for them to pay for the

power as PPM can, where immediate assistance can be provided. It is not one person relying on each other it is about balance helping each other when you need it. The key issue is understanding how community share and their obligations to share, so that people can contribute appropriately to the power that they use.

The people who live in outstations such as Frazier Downs Station (*Quimbeena*), *Yardoogarra*, *Wanamalnyanugn/Mijimilmiya*, *Naja Naja* and *Purpurnganyjal* (Kitty's Well) are set up with Bushlight Renewable Energy Systems. Bushlight was a renewable energy program that was delivered by Centre for Appropriate Technologies (CAT) from 2002 to 2013 in the Kimberley. Although the program is no longer supported by CAT (which still operates from its base in Alice Springs), another company, Ingerreke, continues to provide support and guidance to those communities where the solar systems were introduced across the region. Ingerreke itself is also based in Central Australia and is a sustainable living outstation resource centre. The Bushlight system was based around reliable and affordable power enabling community livelihood opportunities for a family group. Families living in outstations found this easier to plan and manage their own energy service. Two organisations in the Kullarri Region (Broome): Kullarri Regional Indigenous CDEP Inc. (KRICI), Kimberley Regional Service Providers (KRSP) and Mamabulanjin Resource Centre, can also deliver essential services of power and water to outstations for special occasions.

*Yeah me, I've got no solar at the moment so I've got to just whack that fuel gauge. Oh yeah, so I better buy some more fuel. I usually buy four jerry cans just for safe-keeping, especially when's someone going to start generator in the camp. (Community interviewee, 2016)*

When operating, Bushlight worked collaboratively with communities to plan and manage their energy needs and services according to their broader community aspirations (Bushlight 2006). The community engagement process was approached in a very different way from government or other capital works programs including the provision of essential services, where time was spent in communities planning for needs and eliciting broader community aspirations, to ensure the power systems installed would meet the needs of the community. Bushlight also undertook follow-up visits and training of community members to ensure the systems were running correctly and could be sustained into the long term through a remote sensing system to support on-ground community maintenance (Bushlight 2006).

## 2. Communication and awareness

### 2.1 Communicating changes

People in this study identified that changes made to electricity payment systems when new houses were constructed in December 2012-13, contributed to increased stress and were the cause of current difficulties. Some of these houses were placed on accounts (post-paid billing) and Prepaid Meter System (PPM) for power usage. Some respondents felt that Horizon Power either did not ask people, or if they did, they did not sufficiently explain the changes so that people could make an informed decision. Horizon Power introduced the idea behind the options (billing or PPM) to people, but the people in this study felt there was not enough consultation or communication with the householders for people to understand the long-term implications. According to one respondent;

*Well from what I can remember the changes into the supply of power was not discussed. I don't remember again it came in with the construction of the previous set of houses that was constructed and I don't think that people were informed that it will be going to a billing system until, like close to handover date if not when they actually moved in, so I*

*don't recall hearing anything about that because I was quite shock when people started talking and we started hearing about it.*

*(Community interviewee, 2016)*

*They did try and have a bit of an information session a couple of times. I remember hearing about that, and then you know that's the thing it's at the store and all that but not everybody necessarily is going to know about it and a lot of the time people don't take notice of that stuff until it affects them, until it actually happening. There's a lot of that issues too and it is the timing that these information gets handed out to people and then implementation day you know so that can be a problem. You can't expect people to remember.*

*(Community interviewee, 2016)*

Bidyadanga is the largest community in Western Australia and is likely to be gazetted as a town by the State Government in the future (WAPC 2016). Some people in the community don't consider that the community is growing into a town. For these community members, they simply see it as their community, and changes that the government make without consultation aren't accepted easily. With regards to changes to electricity supply, people felt there was no clear information for them to make up their minds, either to switch from PPM to bills or regarding the most recent changes to PPM systems.

*Yeah, and they bin just telling us you know verbally about how this power thing is instead of coming to the whole people and explaining it properly and educating people properly. They bin just coming around and they bin just putting them box on...nah, they bin just switch the power off, no warning. They didn't send no letter or nothing to sign. No they didn't talk to us. Nothing. Not a one. They just put it in and they tried to explain to people but, you know, in that short time a lot of people were confused. (Community interviewee, 2016)*

*No we didn't have any choice, not much. They just came and switched our meter box over.*

*(Community interviewee, 2016)*

This study showed that there was confusion about changes to the different types of electricity supply systems in Bidyadanga, and almost no understanding of why the changes were made to electricity supply systems (changing systems generator, PPM, paper billing and also changes within the PPM system/upgrades). People were also confused about transitioning to something they were not used to. Before this 'mainstreaming' process, the community operated from;

- A generator system where a truck delivered fuel coming from Perth and the cost was paid by 'chuck-in' system for the community;
- The old 'power card system', before power card came in, which was pay as you go;
- The current power card system that was upgraded in 2015.

Now with the 'mainstreaming process' people are experiencing;

- Waiting for power bills to arrive through the mailing system from Horizon Power (people identify this as the paper billing system);
- Overdue bills (it could take months for a bill to come in the mail and people suddenly realise that they have an enormous power bill);
- A new (keypad) Prepaid Meter System for some (which creates confusion);
- Bushlight renewable energy systems in outstations, which is different again and so creates confusions.

Community members across all the language groups in Bidyadanga have found it a challenge getting used to the new ways in terms of paying for power, even after some time. People were used to the old pre-paid system which the whole community had been under for many years. The Karajarri Traditional Owners and the four language groups were familiar with the system and understood how the old card system worked. This system gave people more control of the use of power and independence in how to manage power for their families by paying little bits at a time. Respondents said that if people had systems that you pay as you go across the board, this would lessen confusion and may assist to reduce stress as people can maintain and manage their power plan. The impact of changing systems within a short period of time created some difficulty and impacted on people's behaviour, for example learning the new pre-paid meter system;

*If they were paying for their power as they went, they never had to worry about a power bill, they just had to come together you know making sure they had \$20 or find \$20 to keep the power going. So it gave them more control of the use of power then they had when that changed. (Community interviewee, 2016)*

*Yeah, and they bin just telling us you know verbally about how this power thing is instead of coming to the whole people and explaining it properly and educating people properly about it for this new system now. (Community interviewee, 2016)*

Transitioning to two new systems in a relatively short period of time caused confusion, as people need time and support to slowly get used to new mainstream systems. People would just get used to one system and then another system or change would be introduced and they would have to start again. This suggests inadequate communication of the changes, and inadequate support for people to transition to new systems.

Where there was consultation, it is unclear whether people understood what was being asked (for example, choosing billing or PPM) or what changes were being made (transitioning from the AMPY PPM to the Smart Card PPM system). Participants in this study felt there was not enough information or opportunities for help provided when changing to the new system, with only a few information sessions offered (not necessarily attended well) and no follow up, which has led to confusion and stress amongst Horizon Power customers interviewed in this study.

In contrast, Horizon Power reported an extensive community consultation program involving a three stage process involving three visits each for two days' duration for communication and education of the changes to the PPM system during the ARCPS Program which was finalized in 2010 (ACG 2009). It was not reported whether Horizon Power utilised interpreters for the five or more languages spoken in the community, or whether all visits were well attended.

In a WA pilot survey of PPM use which included Bidyadanga a high number of respondents reported receiving information (written and in person) from Horizon Power on the use of the PPM and where to purchase power cards in the community. This was not a qualitative study and information on whether the changes or implications of the information were understood would have been useful (SECA 2008).

In 2012-2013 new houses were built in Bidyadanga. At that time, the majority of houses in the community were using the PPM systems, with only a few on the paper billing system. Horizon Power gave tenants in the new houses the option of having an account system or prepaid meter system installed in these houses.

*People have a choice now I think between pre-paid and you know accounts (paper bills). I think there is a choice but I am not so sure I think most people still want the prepaid card system or the power card system that's the one they are used to. (Community interviewee, 2016)*

However, community members remained confused on how the different types of electricity systems worked in the new houses for example; one respondent explained;

*... the Horizon Power paper bill, they just showing me all these different sort of numbers here. You don't know which one to pay for or something like that. Previous bill and all that, adjustments, current charges. They can't just get straight to the point, this is how much you paid straight up and this is how much you've got to go. They've got current charges here and they show you two months before time and how much I've got to be paying. They don't show me how much I've paid already and how much less I've got left, you know. I reckon this sucks. (Community interviewee, 2016).*

*Two Horizon Power workers came around and spoke to me but they never really explained all the things that going to happen, they just told me that they're going to change the power boxes and there won't be no more power cards, that I have to go to the store to purchase the power, I think they talking about the new prepaid power. (Community interviewee, 2016).*

Some community members feel that they were reluctantly forced by government to use the new PPM systems that were introduced from the amended Code and they are slowly adapting to the new PPM System. But this does not mean they like it and this is illustrated below:

*No. I never had a chance to ask why the changes. They just came and just said a little bit of details and just said that they had another lot of houses to sign the papers. Horizon they gave a lot of people step by step card but you can't even actually get what it's saying. (Community interviewee, 2016).*

Although Horizon Power did provide opportunities for communication through their consultation process, participants' comments in this study suggest the way the information was delivered was not sufficient to communicate the intended messages, or get through to the community level. This study suggests that miscommunication can impact on community well-being and lead to unnecessary blame – some people in this study felt it was the council making policy or changing systems for community without consultation.

In its guiding documents for community engagement, Horizon Power states its commitment to engaging with Aboriginal customers to ensure “communities are fully informed about any Horizon Power work taking place.” (Horizon Power 2016a).

Horizon Power aims to provide a valuable service to the community and that the community pays for that service on time, the issues identified above need to be addressed so that appropriate cultural systems can be used by customers to meet their obligations. For example, supporting cultural systems so that household bills can be met in a communal manner, rather than as one large paper bill that sends people into debt and causes significant stress and flow on effects.

*Power billing should not be in Bidadanga. No. Just the cards. Get rid of that paper billing because people can't budget. They don't know how much power they're using and then they get a great big bill - and then they can't pay, and then power's cuts, and then they've got to run around to families trying to patch up money to make up for that bill, so that their power can come back on. (Community interviewee, 2016).*

This issue is being felt more keenly with respect to power at Bidadanga, but is an issue that all government service providers will have to address better as reform of remote services by the Western Australian government is rolled out in the Kimberley.

## **2.2 Ownership and control**

The ability of other stakeholders and government agencies to consider or consult adequately with families and with the people who are residing there, is not limited to Horizon Power. A lot of the time individuals feel that they don't have a leadership role or capacity to make any decisions for their community. In this study, this relates to models of electricity production or billing systems.

*Like I said I do recall where they came a couple of times to talk about the changeover of the meters and that would have been the opportunity to inform people, but again their approach was not consistent. It was once or twice, you know twice probably an information sessions and to get anything like that across, it needs to be a bit more you know. You gotta spend time laying it out and coming down, even if it is sort of couple of months beforehand. (Community interviewee, 2016).*

For most people there is a feeling of being not consulted in any way about changes: either those about to happen or changes they want to happen. In this research, respondents talked about a number of possibilities for alternative power production. For example, rechargeable energy systems such as the solar power system with battery, or a hybrid combination of various power sources. For example, one respondent mentioned;

*I mean if you add all the \$100 every week, just think about it, 52 weeks, and \$5,200 in a year. You could straight out pay for your own solar panels with that money and it would be the best. I reckon solar panels the best way, it would be safe and better from destroying mother earth especially polluting the air. (Community interviewee, 2016)*

One person also attributed this to changes to land such as climate change on Karajarri Country and for people in the community, as mentioned below;

*Other countries have got polluted air, whereas us we're lucky because we're in the Southern Hemisphere. And over there they probably feel more climate change you know and feel more of the damage is done to them whereas us we are in the bottom we don't get all those stuff. (Community member, 2016)*

According to the climate change and adaptation on Karajarri Country, the Bidyadanga Community and 'Pukarrikarra' places' research project, Karajarri people and members in the community talked about having clean energy and suggested that plans for future housing should have solar power systems in place that suit community. (Dwyer, 2012)

## **2.3 Community education**

English language literacy is acquired formally and informally. In Bidyadanga where formal education levels are relatively low compared to the rest of Australia (ABS 2008; ABS 2012), people's limited ability to read, for example, keeping track of bills, makes it more difficult to manage their use of utilities. As mentioned, there are five languages spoken in Bidyadanga and for most people English is a second language. Sometime people find it difficult to read the paper bill accounts and understand the details, such as the usage calculations, current meter readings, carbon cost, feed in Tariff, child rebate, airconditioning rebates.

In the past, even just 10 years ago, utilities were managed through the Bidyadanga community office (BACLG). The office helped people deal with stakeholders about everyday business and understand complex government correspondence, for example paying bills, fines, vehicle registration school fees, and other living costs. The focus has now shifted, and less help is available within the community for people with limited literacy. People in the community talked about

having simple plain English information sheets available for them to read easily and understand, as some respondents have mentioned;

*Someone should come and talk to us and tell us about the difference between housing rent and power and water. In the future, I'd say it's best for us to finally know and understand about rent and power. What we want to know is, are they going to be in one bill or still the same or separate. (Community interviewee, 2016)*

From Bidiyadanga community the closest town is Broome, situated approximately 200 kilometres to the north and is the centre in the Kimberley region for Karajarri and community people to do their business. Not many people in Bidiyadanga know how to access help from service providers or others, particularly for financial counselling. Some people don't know who to talk to or who to phone to ask questions, for example, finding assistance through a Budget card that allows regular payments to be made for paper billing accounts. People's ability to query the bills or seek support to understand if bills are incorrect, may also be limited. It would be useful to provide information in a way that people can make sense of it.

*Most of them they are old people they hardly speak language. They can't read. They're illiterate. I don't think they understand their bills. They probably say 'how come I'm getting so much bills? I didn't use this much power.' You know, those sort of things. (Community interviewee, 2016)*

Some respondents said that an agency sub-office, such as Horizon Power is essential for families based in the community. This will enable them to have access to pay bills without incurring further costs such as fuel to travel the almost 400km round trip just to pay a bill. People would also have somewhere to go within the community to ask questions about electricity usage or any new changes for community supply. As some respondents expressed it is important that the person employed in this office should understand both the Horizon Power processes and the community people's requirements.

*We've got different agencies in Bidiyadanga and we've got an agent for Centrelink except for Power Business. (Community interviewee, 2016)*

*If there was an option for them to pay down here in Bidiyadanga and if there was a way for them to pay, then that will be ideal. (Community interviewee, 2016)*

*There should be a little agency or post office to pay the bills. Yes. Yeah, I reckon and save people from going into town and wasting the fuel cost, it is less stressful for me and my family. (Community interviewee, 2016)*

Having Centrelink in the community helps the families to manage the bills so people can pay a little bit at a time. This has been working for rent contributions. Some people believe if there is this type of system available for power bills, then people could manage their finance better through Centrelink deductions, transferred from their income to pay for their power bills.

### 3. Managing finances

#### 3.1 Money management

When residents are away out fishing, hunting, camping or in another town they have reported in this study they are often concerned about the power still running and could be cut off or the bills can become higher. Participants report that they worry about families staying with them and the overcrowding causing large bills, and also worry that power could be turned off any time whether it is during the day time or night time.

*If we go out somewhere and thinking about it I am wondering if the power is going to still be the same, are the bills gonna go up while we're away. I was thinking we might end up going away from home and the power bills might still be going up while we're not in the home.*

(Community interviewee, 2016)

Community outstations residents on diesel systems worry about how the next fuel cost will be paid and how reliable their vehicle is going to be to get into the community before the shop closes, just for fuel and other essential for their homes. As one respondent mentioned;

*We've got to then speed into Bidadanga to get a jerry can of fuel and then come back to camp, fuel it, pump it up, and then check the oil and to start it, Yeah it is stressful that you have to worry all the time about the next money coming in. I am too stressed from all this because I've got other bills to pay. I've got to live as well. (Community interviewee, 2016)*

This indicates participants feel they have no control over their power system. Members of the community interviewed point out that systems are confusing because an individual householder feels that they are responsible for every bill that come in the mail such as rent, power and water.

Most people residing in the community of Bidadanga find it hard to budget because most people are on a fixed income from Centrelink payments. Households on low or fixed incomes are most vulnerable to the increasing costs of utilities, given they have slower income growth and spend a greater proportion of their incomes on essential services (WACOSS 2011; McKenzie 2013).

For low and fixed income households, it can be difficult to save money. Financial strain (spending more than income or just enough money to get through to next pay) was reported for 52% of Aboriginal families in the Broome/Kullari region (which includes Bidadanga) in 2006 (TICHS 2006). WACOSS (2011) suggest that when households are unable to meet the cost of living the impact can be far-reaching and include a negative impact on health and psychological wellbeing, and can cause family conflict and breakdown.

Some residents try to save but are unable to because of other family obligations such as sharing food, fuel, and power cards: this is a normal practice that they provide for with families living in the community. Saving money is something that people may need help with by having a budget plan.

*We have to save up now and rely on our own instead of others and if you rely on others you will end up getting nowhere, you won't end up having to save for power, you'll end up with no food in the fridge. All the food will end up going off especially if you don't pay for your power bill. That's why we have to cope with everything what this new generation bring now, to us today. That's how we have to try and budget money. I think everybody and for some here they know how to use their power cards and some they try to budget we all need to know how to budget. (Community interviewee, 2016)*

There isn't any agency or community service provider established in the community to assist families or low income households to learn to budget, learn mainstream money management and responsibilities or how to save. An agency or community service provider established in the community could be beneficial, similar to the successful MoneyMob Talkabout not-for-profit organisation. Established in Anangu Pitjantjatjara Yankunytjatjara (APY) Lands in South Australia, it was designed to assist community people manage their money, pay bills, access financial assistance and budget (See MMT 2016). A similar program is offered in nearby Derby by Winun Ngari Aboriginal Corporation called Kimberley Money Management.

This issue has been highlighted in studies of remote community contexts in Central Australia where it has been reported that “Indigenous people (at both individual and community levels) face many difficulties in remote communities, as they are positioned at the interface between traditional and Western ways of doing things, very often with an inappropriate range of financial services.” (Pryor & Garner 2012, p59).

Similar support in Bidyadanga could help families to learn how to budget for themselves and adapt to new ways. People feel that they have to miss out on holidays, Christmas, buying clothes for the children and sometimes food. For many residents on low income, there is no ability to save money:

*Every week we're just thinking about food and you think about your power. I don't even care about payday because I'm already broke when I look at my bills. Like food wise I've got two boys who eat a lot, so \$300 dollars a week for food and I have to budget that money and then \$100 a week for power. (Community interviewee, 2016)*

For others, they have learnt to budget or save some money, but it's dependent on individual circumstances:

*Some Countrymen they do budget their money for their food and they still make it work, you know. (Community interviewee, 2016)*

### **3.2 Financial literacy**

This study revealed a lack of awareness of how to read and understand electricity account paper bills, with participants commonly reporting issues:

*Break it up in simple language where they can understand. Not in high English. Or just a picture diagram of indicating things. The only thing is people have to be aware and to know how to use electricity and have maybe picture things there or turn switch off or lights, fans, that has it in every room, you know. (Community interviewee, 2016)*

*Horizon power bills should be written in proper Aboriginal way, I reckon they should. Do it in plain English, like in Aboriginal terms, so we can read'm and understand properly. (Community interviewee, 2016)*

There are no services in place in Bidyadanga itself to be able to pay bills, without leaving the community. People also talked about having a service such as Australia Post in the community to scan and pay bills. A service such as Australia Post or Horizon Power based in Bidyadanga might help to relieve some stress when the big paper bills come in, so that there is support within the community to find solutions. The following comment explains one respondents' difficulty in finding support to understand mainstream systems:

*Yeah, but like we're trying to find out things in our own ways but we need help and to also understand things like this but sometimes it's really hard to go round talking to others and asking them for help, especially help to show me how to use this new system thing. (Community interviewee, 2016)*

Obligations to kin and community influence the way money is distributed, with obligations to share financial resources amongst other community members (Demosthenous et al 2006). This is quite different to how mainstream customers operate, and can be shared or flow between clusters of up to four related households of extended kin (Godinho 2014). This culturally distinctive pattern

of money, referred to by Godinho (2014) as ‘Indigenous money’ “...is ‘disconnected’ from important elements of participants’ socio-cultural world-view, including traditional knowledge systems, social norms, and their sense of cultural identity” (p1), supporting evidence that Indigenous people practice resource sharing under very different contexts than mainstream households and may be impacted by other elements. With regards to management of day to day households in an Aboriginal community setting, relationships with other kin and communities will be a major influence in the ability to pay for utilities, and may also result in a very different pattern of household utility use (for example, larger households or periods of overcrowding).

Cultural differences between Indigenous cultures and Western (mainstream) cultures have been found to impact on learning and behaviour around money (Pryor & Garner 2012). Research in financial literacy support for South Australian APY lands, where the Aboriginal communities have similar demographics and low income households (ABS 2012) to Bidyadanga, found that Indigenous financial literacy programs can be effective, but best practice includes working closely with the community at all stages of program development and delivery (MMT 2012). Many successful Aboriginal community initiatives work from the ground up and create successful practices that involve leadership and input from the local community (Bennett 2011; Pryor & Garner 2012). A grass roots level-up approach has not been taken in the context of changes to Bidyadanga’s power supply.

## Key findings and recommendations

From the themes outlined in this study, the key findings are:

- Lack of appropriate or effective communication from service provider to community level regarding changes to electricity supply systems (Theme: Communication and awareness);
- Regular transitioning of systems causing difficulty and confusion (Theme: Community conflict);
- Possible impact of difficulty in understanding, using or paying for electricity supply causing or compounding people’s health and well-being, such as stress (Theme: Community conflict, Theme: Money management);
- Overwhelming support for old power card system, the AMPY PPM system (Theme: Communication and awareness);
- Cultural practices in contemporary society still in place, but not considered when designing utility supply systems (Theme: Community conflict).

A number of questions remain unanswered that could be followed up in future discussions or research programs:

- What consideration did Horizon Power give to the cultural and demographic background of the community? For example, did communication activities take into account the low literacy levels, the diverse linguistic make-up of the community, English as a second language for the majority and the need for an interpreter in face-to-face activities?
- What sort of communication was completed between Horizon Power and BACGLI or KTLA regarding changes to the electricity supply systems? For example, was this discussed and minuted at BACGLI or KTLA meetings or other organisational information recorded regarding the changeover to the new systems?
- How many eligible Horizon Power customers in Bidyadanga utilise the concessions, rebates or subsidies now available to them?

- Who made the decisions for changes to electricity supply, and was there any discussion or agreement between Horizon Power, BACLGI and KTLA on the way the systems would be transitioned and any follow-up necessary?

The following recommendations are provided in response to the key findings from this study, and will be suggested in the community feedback sessions.

***Recommendation 1: Service providers aim to work from the ground up and partner with the community in service delivery.***

People who live in the community need to be connected to service providers in a way that empowers individuals to make decisions and own them. This is the responsibility not only of the community organisers and service providers, but of the individuals themselves. People want a choice in how services are delivered and how their cultural practices can be supported, and the choice has to come with the right information – information that is communicated in a way people can understand.

There is an indication in this study, that government or service providers dictate services without any community voices being heard or taken into consideration. From many community people’s perspective, they just come in anyway. This may reduce any difficulty or confusion people experienced in this study from transitions to supply systems, through the development processes that support cultural systems.

Jardine-Orr *et al* (2003) in their review of Indigenous housing and governance in remote Indigenous communities identified a clear message from communities of “..the desire to be more involved in decisions that affect them and a commitment to taking more responsibility for these decisions.” (p5). They identified that the community are not seen as the ‘client’ or ‘customer’ and rather as passive beneficiaries, suggesting that the provision of housing should be seen as a partnership between the government and community. Supporting an enabling rather than controlling role of communities to reflect this partnership, would also extend to community councils to manage their relationship with government agencies and program or project managers (Jardine-Orr 2003).

A participatory planning and community development process, similar to the process Bushlight undertook to comprehensively survey and understand community needs before installing renewable energy systems, is ideal. At the very least, a comprehensive planning process ahead of any proposed or required changes to services could be undertaken, and accompanied with a long-term education and support service. Mainstreaming should support cultural practices, and service providers need to work with the community in partnership to develop this.

***Recommendation 2: BACLGI and KTLA establish a participatory planning process for the community to determine preferred models of electricity supply, including alternative systems such as Renewable Energy systems that have been successful in outstations.***

Following on from Recommendation 1, developing a participatory planning process as part of the broader community development work for the community, to work through and determine preferred models of energy supply, considering climate change and renewable energy.

The Bushlight system is very successful and all participants who have a renewable energy system through Bushlight prefer this form of electricity supply. It is easy to understand, training is provided prior to installation and support after the system is installed, and the system matches the needs of the community.

Some participants in this study indicated a preference for renewable energy for the community, either solar power or hybrid, and either for the community as a whole or individual off-grid systems similar to those available in outstations.

***Recommendation 3: Establish a service provider support service in Bidyadanga, where people can pay bills and access support across all utilities/services and financial literacy.***

To minimise difficulties in paying bills or accessing services or support, a Horizon Power sub-office should be established in Bidyadanga. This may also assist to ensure the right concession, rebates or subsidies are being accessed, and establish services such as regular contributions via a Budget card. This may help to relieve some stress when the big paper bills come in.

Establishing a support service for people in Bidyadanga so they can get help for all utilities or services would also be beneficial and assist to reduce difficulties or stress. Paperwork from the different service providers is regularly not understood, not just Horizon Power.

A financial literacy program, similar to that offered by Kimberley Money Management through Winun Ngari Aboriginal Corporation in Derby or MoneyMob Talkabout in the South Australian APY lands could also be considered and co-developed with the Bidyadanga community.

***Recommendation 4: Improve communication between service providers and the community; as a first step BACLGI invite Horizon Power to revisit Bidyadanga and provide culturally appropriate information sessions and simple plain English or pictorial information packs.***

This study indicates that there has been a lack of effective communication when major changes to electricity services have occurred, and there is still a lack of understanding of why changes happened, or where people can access support. There is an indication in this study that Horizon Power's consultation does not enable messages to get through or match the needs of the community, even though there was planned and sufficient time set aside by Horizon Power: it needs another approach.

The inability of Horizon Power to work closely with the community and explain the major changes to electricity systems in culturally appropriate ways (plain English), and in language appropriate to the diverse linguistic community of Bidyadanga (for example, using an interpreter), may have contributed to some difficulty and confusion. Tension between the community and the BACLGI and KTLA around such matters could be avoided.

Horizon Power, in line with its customer service charter (HP 2016a) and Aboriginal community engagement (HP 2016b) could revisit the community to help people still struggling with these changes. Working with linguists and interpreters will be necessary to ensure communication methods accommodate the diverse linguistic and socio-economic background of the community. Both face to face presentations and meetings and information kits to be handed out are recommended. Any information should also be made available in KTLA and BACLGI offices. Utilising existing meetings or forums can assist to get information through different parts of the community, and utilising the services of community organisers with expertise, such as Broome Circle House Financial Counselling, can provide a holistic service.

In the case of any future changes, working with community members to ensure that there is assistance available to people to ask questions and seek support both before, during and after transitions is necessary to ensure they get used to the new system, and minimise any difficulties.

## Conclusion

The principal researcher is a Traditional Owner of Karajarri Country who is concerned about families in Kimberley communities. Karajarri people are Native Title custodians of land and sea Country, where Bidyadanga is located, and Karajarri feel responsible for people from all language groups—the Mangala, Juwaliny, Yulparija and Nyangumarta people—living in the Bidyadanga community.

This research shows that when the different electricity models changed, this was not easily accepted by people living in Bidyadanga community. The key findings of this project were that electricity billing systems caused additional stress to people to do with cultural obligations, causing community conflict, shame and cultural stress. There was also a lack of effective communication about changing systems, which caused confusion. People do not feel any sense of ownership and control of the decisions being made in their community about Power supply. Community education is needed to address these situations and this should include money management and financial literacy.

We recommend that Horizon Power and other government agencies work with Bidyadanga Aboriginal Community Lagrange Inc. (BACLAGI) and the Karajarri Traditional Lands Association (KTLA) to investigate future planning especially concerning affordability and sustainability with the different models of electricity supply. The people of Bidyadanga want their voices to be heard as they are the people living in the communities. It is necessary for Horizon Power to work closely with communities and develop service delivery that suit the cultural systems. In Bidyadanga, these are Aboriginal communities with a collaborative ethic and co-operative cultural practices need to be listened to respectfully. This is also likely to be relevant to other remote communities as well.

The people in these communities know they have to pay for their electricity, water and rent. A solution needs to be found by working with the people from Bidyadanga. The people in Bidyadanga recognise their children are important and deserve a bright future which includes their ability to understand and made good decisions about their future, including attitudes to electricity and technology use for generations to come.

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## Appendix 1: Summary of changes to electricity supply in Bidyadanga

- Aboriginal communities and town reserves historically have had poorer standards of municipal and utility services, including electricity affordability and supply;
- The Aboriginal and Remote Communities Power Supply Program (ARCPSP) was a joint project between Horizon Power and governments to:
  - improve the quality and reliability of supply of electricity to Aboriginal and remote communities;
  - give communities access to a uniform tariff so everyone in WA is paying the same amount of money for a unit of electricity, no matter where they live;
  - Allow access to concessions and rebates not previously available to PPM customers.
- Bidyadanga was part of phase 1 of the ARCPSP;
- Growing concern over equity of power supply in Western Australia led to a review of the WA Code of Conduct for the Supply of Electricity to Small Use Customers (the Code). The WA Code was found to be not as strong as other states and territories for example in South Australia, ACT, and Tasmania
- The Code controls the conduct of Western Australian retailers, distributors and electricity marketing agents to protect the interests of customers with little or no market power (e.g. Aboriginal communities);
- Under the new Code, Horizon Power must supply electricity directly to the customer – not via the community which then recovered costs via ‘chuck in’ systems which meant Horizon Power had to install PPM in each household in Bidyadanga;
- Most Aboriginal communities prefer the PPM system, however, there were hidden costs/issues including the high cost of electricity, high frequency and duration of disconnections, and no access to concessions and rebates. This put people with PPM at a further disadvantage;
- When the Code was amended in 2010, it required Horizon Power to replace the existing AMPY PPM system (which took a card with a magnetic strip) with new PPM systems (receipt with keypad number) that could monitor and report disconnections and enable concessions and rebates to be obtained by the household;
- Thus the old PPM units had to be replaced with new PPM units that could handle the new data/monitoring requirements under the Code (which were put in to protect customers). Other changes include removal of the emergency credit function, but to reduce hardship it now had periods of non-disconnection where power cannot be disconnected after 3pm if credit runs out, which runs up a debt up to \$20 to be repaid at \$2 per day when credit is next applied.
- In 2013, sixteen new houses were completed in Bidyadanga under the Indigenous Land Use Agreement (ILUA) between the State government, the native title holders and the community council. Tenants in the new houses were offered both PPM and paper billing payment systems and although some tenants operate with a paper billing system, most continue to utilise PPM systems.

## Appendix 2: Interview questions



### INTERVIEW QUESTIONS

#### **'Power Usage' in the Bidadanga Community and its relationship to Community and Wellbeing.**

- (1) Have recent changes to the way that power is supplied to the Bidadanga community affected power usage in your house hold? If so, how?
  - (2) Have changes to power usage in Bidadanga affected your household income, and has this had any other impacts within your extended family?
  - (3) Have recent changes to the way that power is supplied to the Bidadanga community affected the wider Bidadanga Community? If so, how?
  - (4) How are community members responding to the two different power supply systems?
  - (5) What social impacts have you experienced in your household and for the wider community from these changes?
  - (6) What economic impacts have you experienced in your household and for the wider community from these changes?
  - (7) Has this dual system of power supply affected the size of households in the Bidadanga community? If so, what changes have you observed?
  - (8) Has this dual system of power supply affected people's mobility, as in. their movement between houses and between communities?
  - (9) Has the dual system affected people's wellbeing with respect to;
    - periods of being unable to access power and complete household tasks,
    - difficulties in restoring power,
    - flow on effects of people without power relying on other community members?
  - (10) What information was provided to you and how were these changes to supply of power to the Bidadanga community discussed prior to their implementation?
  - (11) If you could change one thing in regard to power supply for the Bidadanga community, for the benefit of the community, what might it be?
  - (12) Is there anything else you would like to add?
-



## Plain English Version - Interview Questions

### 'Electricity Supply 'in the Bidiyadanga Community and what it changes in people lives.

- 1) Lately there was changes to how you got your 'Electricity' in the Bidiyadanga Community. So what changed for you in your house? (Can you still use the same things?)

### Money side of the Story?

- 2) Does this new Electricity Supply cost you and your family more? Is it stressful when payday come? Does everyone share paying for this? Is it causing arguments?
- 3) Is the Electricity is cheaper now? What other things can you buy now? If it cost more what are you missing out on. (Fridge, holiday, funeral and fuel cost etc.)
- 4) If your name is on the bill and you can't afford to pay it, does your power get cut off? How do you pay for that bill?

### Family side of the Story?

- 5) What things have changed in your home and the community from these changes? (More people humbugging to stay or less people humbugging or are people happier or less happier – Does the type of electricity have any effect on people relationships)
- 6) Have you got more family living in the house now or less since the electricity supply changes?
- 7) Which type of electricity is more stressful for you and Why? Which type of electricity you like best for your home.
  - 1) Enough power to do what you need every day?
  - 2) Difficulties in getting electricity back on?
  - 3) When family have trouble with their power supply do they come to your house?
  - 4) Is this causing problem with other family? What kind problem?

### Horizon power side of the story?

- 8) Did anyone tell you about any changes for card system to billing system that were going to happen with the electricity supply before they did it? Did you have any choice?
- 9) Do you know what your options are when you can't pay the bill? Or when your power gets cut off?
- 10) Which Electricity do you like best and what is good and bad about the different types of Electricity?
- 11) If you could change one thing in regards to electricity supply for your home or the Community what might that be?
- 12) Is there anything else you would like to add?

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