ELECTRIC POWER SUPPLY AND WORK PERFORMANCE **OF ACADEMIC STAFF IN NIGERIAN UNIVERSITIES:** A SYNERGY ANALYSIS

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ABSTRACT

Electric power supply is a component of the work environment of public and private organizations in Nigeria and other countries of the world. This paper is therefore, a synergy analysis (SA) of electric power supply and the work performance of academic staff in Nigerian Public Universities (NPUs). Assessing the current supply of electricity in terms of regularity and adequacy (which can best be described a epileptic), the paper shows the calamitous effect of this on the work performance of workers in terms of teaching, research development, community service and the discharge of the administrative responsilities of academic staff in Nigerian Public Universities (NPUs). As one of the means of improving electric power supply and arresting energy poverty in NPUs, the paper presents ways of conserving energy in offices and homes of workers.

Keywords: Electric Power Supply; Job Performance, academic Staff; Nigerian Public Universities, Responsibilities.

Introduction:

Formal organizations are designed to coordinate the specialized activities of people toward the efficient achievement of some stated goals (Katz and Kahn, 1978). Tertiary institutions are citadels of learning established for the training of manpower and the conduct of cutting edge researches fundamental in national and global development. As training grounds, tertiary institutions (universities, polytechnics, mono technics, and colleges of education) whether private or public assist in facilitating skills and knowledge acquisition. These goals as Obani (1995) observed, can be summarized under the trinity functions of teaching, research and community service. In line with these trinity functions and the rapid rate at which private and public universities have been established in Nigeria, there is need to focus on their human and material components to ensure that their goals are achieved.

Nigeria possesses the largest university system in Sub-Saharan Africa, historically boasting of 75 universities in 2005 (Adedipe, 2005), 41 polytechnics and 62 colleges of education in 1998 (UNESCO, 2000). Polytechnics, mono technics, and colleges of education are put at 139 in number (Moti, 2010; Obasi, 2008). In 2009, Nigeria has one hundred and one (101) universities consisting of twenty-seven (27) federal universities, thirty-three (33) state universities and forty-one (41) private universities (Okojie, 2009). From 1 publicly owned university in 1948 to 117 universities in 2011, it is obvious that the Nigerian government would have to further expand the university system through the further involvement of the private sector (as is currently done) to accommodate the teeming applicants seeking for university admission yearly(Jekayinfa and Akanbi, 2011). As they further maintained, this made it imperative for education to be deregulated in the country so as to break the government's monopoly of the provision and management of education and give free hand to the private sector in the provision and management of education in the country. Right from the inception of establishing education in 1948, the government conceived of it as a public and social good which should not be left in the hands of the private sector. Hence, from then until 1999, a period of over fifty years, the establishment, ownership, management and funding of universities and all tertiary educational institutions remained the exclusive reserve of the government. As at 2011, there are 47 private universities in Nigeria following the presentation of the provisional license of operation to four new private universities by the Federal Government (Alaneme, 2011). For state-owned universities, the number has increased to 35 (CVC, n.d).

The administration of President Goodluck Jonathan created nine (9) federal universities in 2010 bringing the total number of federal universities in Nigeria from 27 to 36. The staff strength of Nigerian universities in 2009 stood at 99,464 comprising of 27,394 academic staff and 72,070 non-teaching staff. Total students enrolment in Nigerian universities as in 2009 is about 1,096,312 (Okojie 2009). The motivation of the human component in Nigerian universities and indeed all tertiary institutions in the country through the creation of a work friendly environment (by means of constant electric power supply) cannot be relegated to the background if the objectives for establishing them are to be achieved.

In Nigeria, as in elsewhere, tertiary institutions are institutions established to give education "... after secondary education in universities, colleges of education, polytechnics and monotechnics including those institutions offering correspondence courses" (FRN, 2004:36). In Nigeria, universities are organized into government and private-owned universities. As noted earlier, public universities became monopoly in providing tertiary education in Nigeria until when in 1999 the emergence of private providers of university education became a reality following the licensing of the first three private universities. These private universities are Madonna University, Okija, Anambra State; Igbinedon University, Okada, Edo State; Babcock University, Ilisan-Remo, Ogun State(Ajadi, 2010).

Following the establishment of universities and their importance in the country, the need to create an enabling environment by means of provision of infrastructural facilities (like electric power supply, water, libraries, hostels, accommodation, roads, medical, internet,), reward system, and funding became inevitable. Productivity of workers being an important factor in determining the survival and growth of organizations (Akinyele, 2007), scholars and researchers have been concerned in studying factors influencing job performance of workers and how productivity can be enhanced (Okpechi, 1999; Osoba, 1999; Steers and Porter, 2000; Umeh and Usman, 2000; Washnis and Hotzer, 2003). Furthermore, the need to study the effects of electric power supply on job performance of academic staff was also raised by studies like Quick and Quick (1984) and Afolabi and Agbedion (2006) which established inadequate lighting (including electric power supply) as one of the stressors under physical environment stressors to which job stress may be associated which in turn reduces workers productivity and performance.

This study is, therefore, an attempt in making scientific research contributions aimed at improving the job performance of academic staff through studying the effects of electric power supply on job performance of academic staff Nigerian Public Universities.

Unfortunately, efforts aimed at improving the quality of education service delivery are severely constrained by growing shortages of qualified academic staff (Research Africa News, 2009), under funding of the educational sector, deteriorating working conditions, and staff and political repression on campus which generated staff and student strikes during the 1990s, and culminated in year-long closures of the universities in 1992 and 1996 (Oni, 2000 cited in Saint, Hartnett and Strassner, 2003). Other problems facing tertiary institutions in Nigeria include the growing spread of corruption in the sector and infrastructural decay and inadequacy. The effect of these challenges among others is manifested in the poor and worrisome ranking of Nigerian tertiary institutions; poor performance of graduates in the labour market. For instance, no Nigerian university in 2007 is ranked among the first 40 universities in the African continent. ObafemiAwolowo University, the highest ranking university in the country ranked 44 in Africa and 5,834 in the world, while Nigeria's premier university, University of Ibadan ranked 66 in Africa and 6,809 in the world (Larry, 2007).

This trend in the poor ranking of Nigerian universities did not change but, rather, deteriorated as the 2010 statistic below shows. In 2010, University of Ilorin led Nigerian universities in the world ranking by its position of 5484 in the world and 55th in Africa (www.nairaland.com/Nigeria/topic-399420.html;

234next.com/csp/cms/sites). Commenting on the above statistics, the Editorial of the *Nigerian Tribune* of 16 March, 2010 observed that Nigerian universities have consistently ranked very low in the global ranking of universities and even in Africa. For many years, no Nigerian university has made the list of 1000 leading university in the world.

The foregoing background calls for a paper of this nature, to assess the state of electric power supply in Nigerian Public Universities (NPUs) and the effects of this on job performance of academic staff. The study hopes to do both content and empirical analyses of the two variables involved and make contributions to existing knowledge in the field of human resource management.

Assessment of Electric Power Supply in Nigerian Tertiary Institutions:

The Power Holding Company of Nigeria – PHCN (formally National Electric power Authority – NEPA) and (now privatized) is statutorily mandated to generate and distribute power for residential, industrial, governmental institutions and other commercial uses. PHCN is a parastatal of the Federal Ministry of Power and Steel. The performance of PHCN over the years have come under serious criticism because of poor and depreciating quality of services rendered to its customers (Odiaka, 2006; Oke, 2006; Okafor, 2008; Agba, 2010; Akpabio and Akpan, 2010). Ilori (2004), observed that, energy generation and availability in Nigeria declined to 1600MW in 1999 from 5,876 MW installed capacity with only 19 functioning out of the 79 generating units. However, five years after Ilori's assessment, power generation in Nigeria recorded a slight increase as Ola (2009:2) observed that presently the electric energy available in the country is roughly 2000MW out of a total capacity of 6000 MW which they have never reached. Nigeria's economic loss as a result of the epileptic performance of PHCN is estimated at 6 billion naira per year by the World Bank (Onwuka, 2010). A more alarming estimate puts the cost of power outages on the Nigerian economy at 1billion dollars per annum (El- Rufai, 2001).

It is glaring from the foregoing, that, Nigerians, including Nigerian universities suffer from energy poverty and crisis. For instance, Akpama, Okoro, Chikuni (2008), observed that, since the inception of the Cross River State University of Technology, till date, the institution is still battling with energy crises. In spite of Nigeria's abundant energy resources, about 60 percent of its population still has no access to electric power supply (UNDP, 2001; Ajanaku, 2007; Adegbamigbe, 2007). Poor supply of electricity is marked by electricity black-outs and pervasive on self-generated electricity reliance despite government claimed investments in the sector to the tune of 16 billion dollars (Wasiu, 2008) by the Obasanjo's Administration (1999 - 2007).

Nigerian public universities including privately owned ones have as their major source of power supply the Power Holding Company of Nigeria (PHCN). For instance, Akpabio and Akpan (2010) observed that, the University of Uyo (one of the federal universities) has as its major source of power supply, the Power Holding Company of Nigeria. In the absence of electricity from PHCN, there are a number of generating sets at strategic and important administrative offices to supply electricity for administrative works and other purposes. Akpama, Okoro, and Chikuni (2008) findings show that, the Cross River State University of Technology runs a 350KVA diesel generator as alternative power supply from 8am to 6 pm and from 7pm to 11pm, Monday to Friday every week. Some of the academic staff equally solves their electricity problem by running their personal generators in their residential quarters and even offices. The cost of self-generating electricity by companies or public institutions like

university is becoming very expensive because of high cost of diesel, fuel and spare parts.

According to Okafor (2008:89), with poor power supply situation almost all manufacturing companies that have remained in business run private power plant at great cost and this is evident on the amount spent on the importation of generators into the country. Nigeria topped the list of generator – importing countries having surpassed others since 2002.

Nigeria accounted for 35 percent or 152 million USA dollars of the total 432.2 million dollars spent by Africa countries on generator imports in 2005. The above account is for diesel generator of between 2,000KVA and 5,000KVA capacity. The closest to Nigeria in this rating is Sudan and Egypt which spent 40.6 million dollars and 32 million dollars respectively on the product in 2005 (Atser, 2006:28). From the foregoing, it means if Nigerian universities would have to depend on private power plant for supply of electricity in their campuses to staff, students and the university community, funding of the system would have to be increased and must be backed up by prudent management of resources in order to meet up with operating cost of operating private plants. Unfortunately, under-funding of tertiary institutions has been a major challenge in the Nigerian educational industry (ASUU - National Executive Council, 2005; Awah and Agba, 2007; Agba and Agba, 2008; Nwakoma, 2009).

Besides the challenge of under-funding faced by public universities in Nigeria, there are other problems bordering on corruption which have affected job performance of academic staff. According to Bako (2005), for the last one and a half decades, Nigerian universities have been expending over 98% of their recurrent expenditure on paying salaries and allowances and 2% on maintaining services, with zero allocation for research (thus, neglecting one of the primary assignments of academic staff). While about 40 percent of its capital grants are misappropriated by the state officials at the Ministry of Education, National Assembly and Heads of educational parastatals and the universities, the remaining 60% is still looted through inflated contracts, commissions and kickbacks shared between state officials and contractors, and on non-academic related expenditure. Adelemo (2001), aptly observed in agreement with Bako (2005) above, that a relatively small proportion of university funds is expended on academic related activities.

Consequently, Nigerian tertiary institutions and to be specific universities cannot adequately provide electricity, school physical facilities and decent working environment for staff (Buker, 1997, 1999, Agba, Ushie and Agba, 2009). This development constitutes a challenge to human resource management in the Nigerian educational industry, as it hampers the productivity of both academic and non-academic staff. According to Ozor (2004:38), infrastructural facilities are the sinews for effective productivity in Nigeria. This implies that the productivity of academic staff may experience decline by virtue of inadequate electric power supply to offices.

Responsibilities of Academic Staff in Nigerian Universities:

The responsibilities of academic staff are defined within the primary objectives of establishing Nigerian universities – teaching, research and public service (community service). As Bello (2011:213), succinctly puts it, university is often seen as the environment or place for teaching, research and developing people. It is an avenue created for the development of the mind, the individual person, the provision of quality human capital and the development of the society. As the apex of the educational system worldwide, the main aim and objectives of universities over time have been to teach, conduct research and render public service, publish standard textbooks, storage of knowledge, certification of graduates and make enlightened commentaries on topical issues.

By application, academic staff in Nigerian universities are key instrument in human capital development; conduct of research for their career and national development; and community services. In a study, it was discovered that academic staff in addition to teaching perform also administrative functions. However, the time devoted to administrative functions as realized in the study varies. The study which was based on the University of Benin shows that academic staff spent 48 percent of their time on administration, but only 29 percent on teaching (Blair and Jordan, 1994). This is as a result of poor salary structure and condition of service which has eroded the salaries and purchasing power of academic staff making them to give "minimal time to university work and seek one or more income-generating activities to supplement their academic staff salaries "(Blair and Jordan, 1994:1).

The teaching and training functions of an academic staff in the university include, among others; teaching of semester courses allocated to them; setting of examination questions and grading of student scripts; supervision and grading of departmental student projects; invigilation of examination ;computation and preparation of departmental examination results. How well these functions are performed is directly and indirectly affected by the quality of electric power supply in the university system. For instance, the use of Information and Communication Technologies (ICTs) which are of great significance in teaching and research in tertiary educational institutions (Olaofe, 2005; Gambari and Okoli, 2007; Onasanya, et al, 2010) is depended on electric power supply. Information and Communication Technology in the form of computers, software, networks, satellite links and related systems allows people, academic staff and students to access, analyse, create, exchange and use data, information and knowledge in ways that were almost imaginable (Association of African Universities, 2000).

Academic staffs are also expected to organize and attend conferences, seminars and workshops as a mechanism of training the human resources of the country and for solution of the nation's economic, social and political problems. This makes the task and duties of academic staff a developmental one which demand among other things, regular and adequate electric power supply to be effectively done. Consequent upon this, Ologunde, Asaolu, and Elumilade (n.d) advised that there is a strong need to pay special attention to academic staff in the university. Lecturers need to be motivated to maximize their role in the developmental process of the country and the world in general. Another responsibility of academic staff in Nigerian university is to conduct research. According to Chiemeke, Longe, Longe and Shaib (n.d), when employers recruit graduates, they look for graduates from institutions with curricula that use new technology and emphasize current practices.

One of the means to this end is a serious academic research orientation among the academic staff in Nigerian institutions of higher learning. Although, academic staff have made significant contribution in the socio-economic and national development of the country through research and training ; much has not been achieved due to militating factors like energy poverty (irregular and poor power supply);obsolete and absence of research facilities; low motivation to do research; under funding of tertiary educational institutions; overloaded teaching and administrative schedules which leaves little time for research ,difficulty in accessing research funds. etc. (Okebukola, 2002). Discussing the effects of electric power supply on the job of conducting research by academic staff, Ogunruke (2010), succinctly observed, inadequate power supply makes research tedious and results questionable.

Academic staff are expected to perform their job which is generally considered as fundamental in accomplishing the Nigerian National Objectives for Higher Education which include to encourage learning, develop high level manpower, generate and disseminate knowledge, undertake research on national and local development problems, maintain the national cultural heritage and render public service. These objectives are also to be attained through a system that will produce people of special motivation and qualification and develop the individual to his full potential for the service of self and the nation (University of Calabar, n.d).

The National University Commission (NUC), observed that the quality and quantity of research output of tertiary educational institutions in Nigeria was about the best in Sub-Saharan Africa up to the late 1980s (Karani, 1997). By 1996, the quantity and quality of research declined so badly (Okebukola and Solowu, 2001 cited in Chiemeke; Longe; Longe; and Shaib(n.d). It is glaring from the foregone disquisition, that, the importance of physical or infrastructural facilities in the job performance of academic staff is an issue that must not be compromised in Nigerian universities and other tertiary institutions in the country. Acknowledging this, Anyanwu (2000:124) observed aptly that:

Putting the country back on the path of recovery and growth will require urgently rebuilding deteriorated infrastructure and making goods and services available to the citizenry at affordable prices.

To buttress this point further, Adeogun (2001), a positive relationship discovered. between institutional resources and the academic performance of students. More so, UNESCO (2002), in its findings agreed that without adequate physical facilities, no worthwhile learning can take place. Hence, Uzoka and Fabiyi (2007) cited in Fabiyi and Uzoka (2008) recommend and observe that, for proper teaching and learning to take place, there must be adequate infrastructure and in many tertiary institutions in Nigeria, the lecture halls are overcrowded and many of the students stay outside because of inadequate accommodation. Even those who are seated inside are not comfortable because classrooms are poorly ventilated and not well lit. Laboratory equipments are obsolete and where they are up to date, the problem of power supply affects their maximum utilization. This inevitably raises the need to examine challenges facing the job performance of academic staff in Nigeria universities.

Effects of Energy Poverty (Crisis) on Academic Staff in Nigerian Universities:

As earlier noted and worth reiterating here, Nigerian public universities suffer from infrastructural inadequacy among which is energy crisis (poverty). If electricity is considered as the life wire of most academic activities like teaching, research and community service, it follows therefore that its inadequacy or absence would have calamitous effects on job performance of academic staff and the growth and development of Nigerian universities. This section of the study, is therefore, devoted in examining the possible effects of energy poverty (crisis) on academic staff from the standpoint of content and conjectural analyses. These effects are briefly discussed below:

Effects of Energy Poverty (Crisis) on Research Development of Academic Staff:

Irregular and poor supply of electricity in Nigerian universities reduces the time spend by academic staff

in conducting research for national and career development. According to Agba (2010:20), most government workers (academic and non-academic) are finding their offices inconvenient for serious concentration at work especially in dry seasons because the air conditioners and fans where they are even available cannot be used during office hours due to lack of power. The result is that the office becomes very hot and thus hinders serious concentration at work. Abdou, El.Kholy and Abdou (2006), have equally argued that individuals may spend up to 90% of their time indoors. This means that when indoors are not made convenient by irregular power supply and inadequate ventilation there is little man can do in terms of being productive. Thus, Akinyele (2007), concluded in a related study, that, in both private and public sectors of Nigeria's economy, lack of needed facilities have the greatest negative effect on job performance of workers.

Agba (2010), further observed, that, the performance of workers reduces in such an in conducive work environment. For instance, academic staff lacks access to vital information in the event where information centres does not operate in full capacity due to lack of electricity. For instance, Gyong (2010) observed, information on donor agencies are available on their web sites, donor development offices and public libraries. In most cases, academic staff willing to seek grant for their researches are handicapped where there is electric power problem. Put differently, the volume of information and useful data available is seriously reduced. More so, the quality of research output by lecturers is reduced as they only have limited access to recent information that would have boosted the quality of their research findings. Amount of laboratory experiments carried out are reduced as the equipment cannot be operated due to absence or poor supply of electric power.

Despite the above predicament faced by academic staff, research and publication remain a yardstick for promotion and assessment for academic positions (Cheimeke, Longe, Longe and Shaib, http://www.webpages.uidaho.edu/mbolin/chiemeke-

longe-shaif.htm). This implies, among others, that, infrastructural inadequacy like poor electric power supply affects the career development of academic staff by reducing the quantity and quality of research conducted.

Effects of Energy Poverty (Crisis) on Teaching Function of Academic Staff:

The quality and resourcefulness of any teaching assignment performed by any academic staff depend on a large extent on the access to information and data available. Thus, in this era of information technology, the job of teaching has been made much easier for academic staff. Lack of electric power supply hinders the effectiveness of any internet and information technology installed, thus affecting the quality of teaching delivered by academic staff. According to Stringer (www.nbrii.com/.../5factorsthataffect-aspx), for an employee to be efficient and productive in today's job environment there is need to equip him/her with technological tools. As he argues, organizations that do not upgrade or ignore the necessity for technological tools with personal computers, blackberries and other 21st century tools, run the risk of diminished employee productivity. It was discovered that wireless notebook personal computer users increased their productivity by 100 hours per year. Interestingly, these tools require regular power supply for their effective utilization by academic staff. There are allegations of ill preparedness among some academic staff for scholarly work and lack of commitment to job performance. The result is that universities that supposed to be centres of academic and social activities have remained dull and uninteresting (Atafo, 1986; Idogho, 2006). According to Oyeniyi (2010), the prevailing circumstances where laboratories are grossly deficient (due to irregular power supply and other factors), lecturers are compelled to introduce a new teaching approach known as "TOP"- Theory of Practical or generally referred to as Alternative to Practical (ATP). This, no doubt, has, devastating effects on Nigeria's quest for science and technological breakthrough.

Ogbodo(1995) and Campbell (1996) cited in Oyeniyi (2010), agreed with the above reasoning when they observed that, infrastructural facilities in schools are to facilitate teaching and learning process and their inadequacies or absence adversely affects teaching/learning process in a system. This implies among others that irregular electric power supply and other infrastructural inadequacies affect the quality of and manpower resources produced by skill universities in Nigeria. For instance, it has been succinctly noted that because of incessant strikes, unstable and incoherent government educational policies, lack of good facilities, disrupted and disjointed academic calendar, issues of funding, outdated course materials and many other challenges. Nigerian tertiary institutions produce graduates that have not been able to meet up with the standard output expedient in today's workplace (http://getthatnigerianjob.blogspot.com). They have become centres for academic certificates acquisition rather than the training ground for skills and knowledge acquisition.

Frequent strikes in tertiary institutions (which are sometimes products of poor infrastructural facilities) have led to the production of "half-baked graduates" who cannot suitably fit into the changing world labour force (Agba, 2004; Agba and Agba, 2008). According to Liebenberg and Barnes (2004), the biggest contribution an institution of higher learning can make towards the economic development and social advancement of South Africa and other countries is to deliver quality manpower.

Effects of Energy Poverty (Crisis) on Administrative Function of Academic Staff:

It is expedient to say that irregular power supply has adversely affected the discharge of administrative functions of academic staff in tertiary institutions. In most public universities in Nigeria, academic staff are sometimes saddled with the responsibility of computing departmental results; processing and recommending applicants for admission into the department; writing and taking minutes of Departmental Board of Studies; registration of new and old students in the department; writing official memos and letters like the case of the Head of Department and a host of others. A close assessment of these administrative functions shows that their discharge by academic and non-academic staff are facilitated by the presence of electric power supply. computer software for result For instance. computation needs electric power to power computer systems and installations.

Thus, the absence of regular electric power supply is most likely to delay the computation of results and the release of certain vital memos in tertiary institutions.

If the foregoing is the case, then it will be an indictment against the higher education institutions for not being able to render the required service that the customer (learner) seeks in Nigeria and elsewhere (Liebenberg and Barnes, 2004:1). Furthermore, regular electric power supply in the workplace may constitute a strong means of improving the conduciveness and air quality of the workplace through the provision of ceiling and standing fans and air conditioners. Wood (1989) cited in Abdou, El.Kholy and Abdou(2006), observed that, we could enhance the job performance of 20% of our workforce simply by improving the air quality of most offices. Thus, organizations with the goal of cutting down expenses on electric supply will sacrifice employee comfort and ventilation to their detriment.

Landsberg (1978), stressed the above point further by stating that, if environment is too hot, productivity goes down and if people do not feel comfortable, they are more liable to make errors, have accident or perform a comparatively small amount of work. This applies to academic staff in Nigerian tertiary institutions and the discharge of their duties whether it is in the area of research, teaching, administration or community service. The problem of energy poverty faced by Nigerian universities may have deepened the problem of brain drain in the system. For instance, Chikwem (2006), notes, there is massive migration of extraordinary professors to foreign institutions because of poor incentives and lack of infrastructural facilities to effectively and efficiently perform the duties of academic staff.

Effects of Energy Poverty (Crisis) on Community Service Delivered by Academic Staff:

Community service as noted earlier in this study constitutes a key component of the responsibility of academic staff in Nigerian tertiary institutions. The question is what form does community service rendered by tertiary institutions through academic staff take? More so, in what ways does energy poverty (crisis) affects the quality and quantity of community service rendered? These are issues this section of the study seeks to address by way of content and conjectural analysis.

Communities hosting tertiary institutions enjoy social services like water supply, electricity and others provided by tertiary institutions. The extent to which, the social responsibility provided by tertiary institutions to their host community is a function of their financial ability and leadership foresight. For instance, universities with teaching hospitals offer some form of health services to their host community although with a fee attached. Kamos and Tahan (2009) have shown the extreme importance of electric power and installation quality on health care facilities and human beings. They aptly noted that electricity in the hospital environment is a source of life, capable of interfering with the patient's ability to survive or not, through the employment of pulmonary ventilation equipment, infusion pumps, lights for surgical illumination, emergency power, compressed air for oxygen, among others. This implies that energy poverty (crisis) has to be addressed in Nigerian universities in order to reduce the risks of death among patients and provide better health treatment.

Importantly, most Nigerian universities are potential commercial centres providing jobs to a host of computer operators, owners of photocopying business, binding of projects and sale of soft drinks. These business outfits are adversely affected by the poor quality of electric power supply in Nigerian tertiary institutions. It increases the operating cost of business outfits since they have to depend on private generators and by so doing affects the prices of services rendered to members of the university community.

Energy poverty (crisis) also reduces the quality of community services rendered by universities offering agricultural programmes. According to Ugwu(2008), in predominantly agricultural areas, rural electricity is highly needed for best practices in irrigation for water supply to farms and provision of drinking water for domestic use to the rural dwellers (host communities).

Ways of Conserving Electricity in Nigerian Tertiary Institutions for Effective Job Performance of Workers:

Conserving electricity in Nigeria and other countries of the World has become increasingly vital especially with the decline in supply of power; cost of energy charges, and increase in shortages of energy to homes and offices. Academic staff and other consumers of electricity in both public and private universities in Nigeria can find as presented below a number of methods of cutting down on their electrical use, especially with electrical equipment and appliances commonly found in offices, business centres and homes. The following ideas taken from Microsoft Encarta of 2009 shows in clear terms the various ways of conserving electricity:

Table 1:	Ways o	of Conserving	Electricity
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Uses of	How To Conserve Electricity		
Electricity			
Air conditioners	Check and clean the air conditioner's filter once a month; make sure the air conditioning unit is the proper size for the room it is cooling; locate the air conditioner on the north or east side of a house in a shady area; ventilate the house's attic to reduce heat buildup; install ceiling fans to improve air circulation.		
Dishwashers	Wash only a full load; turnoff drying cycle, open door to air dry dishes.		
Clothes and washers dryers:	Use only with a full load; use warm or cold water, reserving hot water use only for heavily soiled clothes; use only full loads for the dryer and if a second load is necessary, dry that load immediately after the first to retain as much heat as possible; clean lint filter before each load.		
Computers	Turn off computers when not in use or set the computer to energy-saving mode.		
Lights	Replace incandescent bulbs with screw-in fluorescent bulbs, which use 75 percent less electricity and last at least 8 times longer; turn lights off when not needed; install light dimmers or photoelectric switches that automatically turn off lights during daylight or install timers to control use of lights; for lights used for home security, install motion detectors so lights come on only when motion is detected.		
New Appliances	Replace aging appliances with new, more energy-efficient models when possible; look for Energy Star label designating an energy- efficient appliance.		
Ovens and Stove tops	Use microwave instead of oven where possible; food in glass dishes can be cooked at lower temperature; preheating oven is usually unnecessary; on the stove top cook with covered pans and match pan size to the size of the burner.		
Refrigerators	Check door seals to make sure there are no air leaks; clean condenser coils on the back of the refrigerator; keep refrigerator away from oven or dishwasher and give the unit breathing room; turn thermostat down to 37 degrees Fahrenheit; turn on energy saver switch.		
Water Heater	Lower the heater setting to 120 to 130 degrees Fahrenheit; insulate the water heater and any exposed het water piece we low flow shower heads		

Source: Microsoft Encarta 2009.

Microsoft Corporation (1993-2008), DVD

Conclusion and Recommendations:

Electricity though recognized as a necessity in the accomplishment of the objectives for establishing universities in Nigeria, its provision in a satisfactory and regular manner to offices of academic staff during working hours have remained epileptic in Nigerian

public universities. It is imperative to reiterate that; electric power supply has had differing effects on academic staff just like any other motivational related tools. For some, especially those working with a university characterized by epileptic electric power supply, it is frustrating. This means that inadequate or irregular electric power supply inhibits iob performance of lecturers. Thus, government and management of affected universities must address urgently this challenge by putting in place effective structures to perform "structural functions" of supplying adequate and regular electric power supply to offices of lecturers for effective teaching, research, and discharge of administrative functions.Since electric power supply to offices in Nigerian universities has a significant influence on lecturers' output in terms of teaching, there is need to explore effective means of supplying regular and stable electric power to lecturers' offices. To do this, there is need for government and the university authorities to invest in the purchase of electrical plants that will complement the power supply from Power Holding Company of Nigeria (PHCN);

It is also recommended, that, the management of universities faced with the problem of irregular and inadequate power supply caused by vandalisation of electrical installations should put in place security measures through which vandalisation of electrical installations can be forestalled. This could be achieved by posting security men around electrical installations and partnering with security agencies in the country to ensure the safety of electrical installations. By so doing, the irregular and inadequate electric power supply arising from vandalisation of electrical installations can be prevented.

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