

STATEMENT OF PURPOSE

Christopher Flavin, the former president of the Worldwatch Institute once said, *“The real potential of electricity lies not in providing social amenities but in stimulating long-term economic development.”* For a nation's industrial potency and development level to preeminently manifest, there need to exist a strong statistical correlation between a country's energy utilization and its economic output. In Nigeria, energy dearth may sound incongruous despite being a major oil-producing nation, however, mordant energy shortage for many years in Nigeria have led to recurrent and steady electric power disruption with severe consequences for economic growth and development, improvement of life for its people, and the safety of its citizens.

My goal hasn't always been solely academic, but rather in making sense of the chaos in my environment, turning all these challenges into opportunities as I'm quite the adventurer. Opting in for Electrical and Electronics Engineering for my under-graduation at The University of Ilorin, Nigeria began with my growing curiosity about Electrical Machines, and a natural inclination for science, especially mathematics and physics. From thereupon, began my understanding of the demesne which progressively grew into admiration and then a firm fervor in Power Systems. Upon the completion of a master's degree in this chosen field from the University of Western, I wish to achieve my goals of contributing to the field of Power Systems in Nigeria.

The challenges faced by the Nigerian power sector, coupled with my strong proclivity towards Power Systems, urged me to focus my undergraduate research work in that domain. The project titled *“Investigation of the Transient Stability of the Nigerian 330-KV Electrical Network Incorporating a Renewable Energy (Solar) Source”* focused on a generic model of a solar photovoltaic power generator which was designed and connected to the national grid network, and then simulated for transient stability. The proposed network was also modeled with MATLAB-SIMULINK to investigate the effect of the solar power station on the system. During the project, the realization that the installed electricity generation capacity in Nigeria is 40.4% of the energy demand in the country (the capacity made available for onward transmission is slightly above half of the installed capacity) left me desirous of learning more to present a solution to the power crisis that has inundated Nigeria for more than two decades [1].

During my undergraduate study, I was as active as I could be both in academics and extra curriculum activities. From being the organizer of quiz competitions at the faculty level to Class Representative; I ensured that I was dependable where the activity was. In my third year, my academic excellence paved ways as I was selected by the students' president of the Faculty of Engineering to work with a team whose aim was to help students in the institution maintain a high academic standard through tutorials. I taught Mathematics to the first-year students. By the time I was in my final year, I was appointed the leader of the team. My active participation improved my mental ability with leadership and teamwork skills. Towards the conclusion of my undergraduate study, I also had the opportunity to lead a team of colleagues in a Community Based Experience Scheme (COBES), where I mastered the art of implementation, decisiveness, execution, and supervision.

Settling down for Power Systems, I knew I wanted to make a career out of this, and hence, decided that I seek more knowledge in this area by pursuing a master's degree and become an expert within this sector. My humble beginnings provided me the desire for academic excellence. At a very young age, my parents had conditioned my mind and inspired me to trail the path of education even though neither of them had the privilege of attending college. Such has been my journey that, I had the honor of being a recipient of four different scholarship awards, and also graduated in the top 3% in my department which earned me a First Class Honors degree.

Upon the completion of my master's degree, I would like to pursue my doctorate degree, and use my research time to make significant discoveries within this same field. Eight years from now, I hope to work as part of a leading research group, contributing my quota to the sphere of power and energy. I also see myself as an expert and entrepreneurship consultant in the field of energy management. I would be providing these services for regional organizations, within the country with the aim of helping small and medium enterprises become more competitive and ease aspiring entrepreneurs to do business in that domain to boost local employment.

The University of Western Electrical and Computer Engineering Master's Program occurs extensively in my mind, because of the strong connections the department have with industry electric utilities and leading manufacturing organizations; the likes of RTDS Technologies, General Electric, etc. More importantly, I am especially enthusiastic about continuous research on Power Systems and anticipate learning. Generally, I have decided to pursue this program with this reputable institution because of the value it adds to its students, the level of exposure it gives to them, propelling them for the future and how its products are not only successful in the chosen field but also impact their societies.

REFERENCE

[1] O. S. Ezennaya, U. O Okolie, O. I. Ezeanyim and O. E Isaac, "Analysis of Nigeria's national electricity demand forecast (2013-2030)," *International Journal of Scientific & Technology Research*, vol. 3, no. 3, pp. 333-340, March 2014.