

*ELECTRICAL POWER ENGINEERING*

## Department of Electrical Power Engineering Postgraduate Research Template

#	<b>Student Name / Surname</b>	Vishen Sunkardutt	<b>Start Date</b>	27/07/2018	<b>Supervisor</b>	Dr E Ojo
	<b>Title of Project</b>	Optimized Proposal for Advanced Metering Infrastructure in Metropolitans	<b>Completion</b>	30/11/2019	<b>Co-Supervisor(s)</b>	Mr K Akindeji
<b>Program of Study</b>			MEng: Electrical Power Engineering			
	<b>Student #</b>	20903494	<b>Email Address</b>	<a href="mailto:vsunkardutt@gmail.com">vsunkardutt@gmail.com</a>		

**Synopsis of Research Project: (< 300 words)**

**RESEARCH QUESTION:** A study into the technical and financial viability of Advanced metering infrastructure in a key Metropolitan in South Africa.

**BACKGROUND / IMPORTANCE OF TOPIC:** South Africa is far behind with regard to worldwide technological advancements in electrical infrastructure. Implementing Advanced metering protocols in key metropolitans will address issues such as energy shortages, meter readings, revenue protection, customer service improvements and load management. Smart Metering Systems allows for the automatic process, transfer, management and utilization of metering data. It provides timely consumption information for both energy suppliers and consumers. Also supports services that improve energy efficiency of the energy consumption and the energy system (I.e. generation, transmission, distribution and supply).

**AIMS & OBJECTIVES:** Economic drivers for the implementation of Advanced metering infrastructure are low electrification levels, management of networks (ie. outages, load control, maintenance and extension.), improved meter billing, improved customer service, reduction in energy losses and energy conservation.

**METHODOLOGICAL APPROACH:** Investigate and interact with utility management and metering manufacturers to determine the view, strategies, future vision for the specific utility. Carefully determine and evaluate specific challenges in the municipality. Development specifications for AMI(Advanced metering infrastructure) to be implemented.

**DELIVERABLES:** Investigate and propose Advanced metering infrastructure components (Consumer Meters, communication medium and smart meter servers).

~~Coordinate and lead information of Ethelwini Municipality supply region. Determine the functional~~

