



- BATTERY NOTES:**
1. TWO BATTERY BANKS TO BE SUPPLIED PER UPS EACH WITH ITS OWN IP42 CABINET
 2. EACH BATTERY BANK TO CONTAIN ONE OR MORE SERIES BATTERY STRINGS
 3. EACH BATTERY BANK TO BE RATED AT 2HRS i.e. 50KWH & 80%DoD. FOR A TOTAL OF 4HRS i.e. 100KWH & 80%DoD. FOR BOTH BANKS
 4. BATTERY CABLES TO BE SUPPLIED, ESTIMATED LENGTHS AS FOLLOWS, KAMBURU 50M, MASINGA 25M EACH. BATTERY CABLE TO HAVE MINIMUM RATING OF 120% MAX RATED BATTERY CURRENT
 5. EACH BATTERY BANK TO HAVE A FUSED ISOLATOR AND TEMPERATURE SENSOR
 4. BATTERIES MUST BE TYPE TESTED AS PER IEC 60896 - 21/22 TYPE TEST REPORT TO BE PROVIDED

- UPS NOTES:**
1. EACH UPS TO HAVE TWO 20KVA WITHDRAWABLE (DRAW OUT) POWER CONVERTER MODULES IN 2N REDUNDANT CONFIGURATION
 2. EACH UPS TO HAVE A HMI WITH GRAPHICAL DISPLAY, CONTROL PUSH KEYS, UPS OPERATING STATUS INDICATION AND PROGRAMMABLE ALARM SECTION
 3. MAIN 3PHASE INPUT CABLE, BYPASS INPUT CABLE AND SINGLE PHASE OUTPUT CABLES ARE NOT IN SCOPE OF SUPPLY THEY ARE EXISTING AT SITE AND SHALL BE TERMINATED TO THE NEW UPS
 4. UPS MUST BE TYPE TESTED AS PER IEC 62040-3, TYPE TEST REPORT TO BE PROVIDED
 5. ALL CONNECTIONS SHALL BE TNS (SINGLE PHASE THREE WIRE, THREE PHASE FIVE WIRE)
 6. BATTERY CHARGER SHALL BE RATED FOR A FULL BATTERY RECHARGE FROM 20%-100% SoC IN SIX HOURS WITH A STANDING LOAD OF 50% (10KVA) CONNECTED TO THE UPS

				DATE	NAME	SHEET TITLE	PROJECT TITLE
				Drawn 13/04/2018	D MUYA	SPECIFICATION DRAWING - KGN-HYD-013-2018	SUPPLY OF INDUSTRIAL UPS SYSTEM
				Checked		PROPOSED SCADA UPS SINGLE LINE DIAGRAM	FOR KAMBURU AND MASINGA POWER STATIONS
				DRAWN FOR TENDER ILLUSTRATION PURPOSE ONLY			DRAWING NO. KAM-CAX-001-2018
	0	TENDER ADDENDUM	16/04/2018	DMUYA	SHALL NOT BE USED FOR EQUIPMENT MANUFACTURE		1 OF 1
No:	Revision	Date	By	SCALE NOT TO SCALE SHEET SIZE A3			FILENAME UPS SLD

KenGen