MACTAN ELECTRIC COMPANY, INC.
LAPU-LAPU CITY
JUSTIFICATION OF ACQUIRED EQUIPMENT

	Project Details	Description	Rank	Driver	Type	Purpose	Impact if Project not Implemented	Schedule of Purchase	Quantity	Unit cost	Total cost
a)	Purchases of the following Laboratory Equipment.										
	1. Thermal Scan	Preventive Maintenance		Non-Network		To detect loose connection, leaking insulator. To improve reliability.	Loose connection and leaking of insulator can be detected thru Thermal scan. Losses and Reliability can not be improve.	2008	1	1,900,000.00	1,900,000.00
	2. PQA (Power Quality Analyzer)	Preventive Maintenance		Non-Network				2008	1	380,000.00	380,000.00
	3. Kw-hr Meter Tester	Preventive Maintenance		Non-Network		Field testing on Kw-hr meter to check the accuracy / Compliance		2009	4	350,000.00	1,400,000.00
	4. Current Transformer Tester	Preventive Maintenance		Non-Network		Testing of C.T. before installing and Field testing.		2010	1	300,000.00	300,000.00
b)	Purchases of the following Switchgear.										
	1. SF6 Circuit Breaker, 69KV, Outdoor, 600A, 25KA (Substation #3 - Basak)	Upgrading of 69KV OCB to SF6 Circuit Breaker	1st Priority	Network non-growth	Renewal	Changing OCB due to Oil Leaking. To improve Reliability	Availability of Replacement parts and a consumption of 1 pail every 4 months and no available here in the Philippines only in China.	2008	1	2,039,113.00	2,039,113.00
	3. SF6 Circuit Breaker, 13.8KV, Outdoor, 400A, 25KA (Fdr# 1, 2, 3)	Upgrading of 13.8KV OCB to SF6 Circuit Breaker	2nd Priority	Network non-growth	Renewal	Changing OCB due to Oil Leaking. To improve Reliability	Replacement part of China are Obsolete	2010	3	1,338,719.00	4,016,157.00
	4. SF6 Circuit Breaker, 13.8KV, Outdoor, 400A, 25KA (Fdr# 8, 9)	Upgrading of 13.8KV OCB to SF6 Circuit Breaker	2nd Priority	Network non-growth	Renewal	Changing OCB due to Oil Leaking. To improve Reliability	Replacement part of China are Obsolete	2012	2	1,048,380.00	2,096,760.00
	5. SF6 Circuit Breaker, 69KV, Outdoor, 600A, 25KA (Substation #2-Airport)	Upgrading of 69KV OCB to SF6 Circuit Breaker	2nd Priority	Network non-growth	Renewal	Changing OCB due to Oil Leaking. To improve Reliability	Last Feb., 2008 MECO experienced a 18 hours interruption because of changing 3units OCB due to Oil leaking and no replacement parts available.	2013	1	2,039,113.00	2,039,113.00

MECO PBR "C" justification 2

c)	Purchases of the following Protective Equipment										
	1. Transformer Protection (Substation #2-Airport)	Upgrading of Transformer Protection	1st Priority	Network non-growth	Renewal	Changing Mechanical relay to Electronic. Mechanical relay is not compatible with Electronic.To improve reliability	1) Relay from China are Obsolete	2008	1	334,357.00	334,357.00
	2. Transformer Protection (Substation #3-Basak)	Upgrading of Transformer Protection	2nd Priority	Network non-growth	Renewal	Changing Mechanical relay to Electronic. Mechanical relay is not compatible with Electronic.To improve reliability	1) Relay from China are Obsolete	2009	1	334,357.00	334,357.00
	3. Feeder Protection (Fdr# 2, 3)	Upgrading of Feeder Protection	2nd Priority	Network non-growth	Renewal	Changing Mechanical relay to Electronic. Mechanical relay is not compatible with Electronic.To improve reliability	1) Relay from China are Obsolete	2009	2	130,163.75	260,327.50

c)	Purchases of the following Switches.										
	1. Automatic Circuit Recloser	Installing of Automatic Circuit Recloser	1st Priority	Network non-growth		Automatic sectionalizing of faulted lines and restoring power to unfaulted lines quickly.To improve reliabilty indices.	1) Wide area of interruption 2) Feeder interruption is high because of the absence of Recloser	2009, 2010 and 2011	6	900,000.00	5,400,000.00