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1. SCOPE

Provide **Preventive Maintenance** and **Support** requirements for the NMB Bank Plc Branch Generators in relation to the operational continuation of the critical assets.

GENERATORS AND THEIR LOCATION

Zone 1:

No	BRANCH NAME	REGION	ZONE	MANUFACTURER	CAPACITY (kVA)	MAKE	Y/PUR
1	AIRPORT	Dar es Salaam	Z1	Marapco	80	Perkins Engines (UK)	2010
2	GONGO LA MBOTO	Dar es Salaam	Z1	African Power Machinery	60	Perkins Engines (UK)	2019
3	BANK HOUSE	Dar es Salaam	Z1	Olympian Power Systems	80	Perkins Engines (UK)	2004
4	BANK HOUSE	Dar es Salaam	Z1	Caterpillar	300	Caterpillar	2004
5	ILALA	Dar es Salaam	Z1	Marapco	100	Perkins Engines (UK)	2004
6	KARIAKOO	Dar es Salaam	Z1	Olympian Power Systems	100	Perkins Engines (UK)	2004
7	KIGAMBONI II	Dar es Salaam	Z1	Olympian Power Systems	65	Perkins Engines (UK)	2008
8	CONGO STREET	Dar es Salaam	Z1	Marapco	80	Perkins Engines (UK)	2011
9	MAGOMENI	Dar es Salaam	Z1	Olympian Power Systems	100	Perkins Engines (UK)	2004
10	MANDELA ROAD	Dar es Salaam	Z1	Marapco	80	Perkins Engines (UK)	2013
11	MBAGALA	Dar es Salaam	Z1	Marapco	100	Perkins Engines (UK)	2012
12	MBEZI	Dar es Salaam	Z1	Marapco	100	Perkins Engines (UK)	2011
13	MLIMANI CITY	Dar es Salaam	Z1	GB Power	100	Perkins Engines (UK)	2017
14	MOROGORO ROAD	Dar es Salaam	Z1	Olympian Power Systems	100	Perkins Engines (UK)	2004
15	MSASANI	Dar es Salaam	Z1	Marapco	80	Perkins Engines (UK)	2015
16	MWENGE	Dar es Salaam	Z1	Olympian Power Systems	30	Perkins Engines (UK)	2006
17	OYSTERBAY	Dar es Salaam	Z1	Marapco	80	Perkins Engines (UK)	2014
18	SINZA	Dar es Salaam	Z1	Marapco	100	Perkins Engines (UK)	2013
19	TANDIKA	Dar es Salaam	Z1	Marapco	60	Perkins Engines (UK)	2014
20	TEGETA	Dar es Salaam	Z1	Marapco	80	Perkins Engines (UK)	2011
21	TEMEKE	Dar es Salaam	Z1	Olympian Power Systems	100	Perkins Engines (UK)	2004
22	UBUNGO	Dar es Salaam	Z1	AJ Power	60	Perkins Engines (UK)	2005
23	UHAMIAJI (KURASINI)	Dar es Salaam	Z1	Marapco	65	Perkins Engines (UK)	2011
24	UNIVERSITY	Dar es Salaam	Z1	Marapco	65	Perkins Engines (UK)	2012
25	CHAKECHAKE	Kusini Pemba	Z1	F.G Wilson	65	Perkins Engines (UK)	2009
26	KILWA	Lindi	Z1	Marapco	65	Perkins Engines (UK)	2015
27	LINDI	Lindi	Z1	Marapco	80	Perkins Engines (UK)	2012
28	LIWALE	Lindi	Z1	Marapco	65	Perkins Engines (UK)	2011
29	NACHINGWEA	Lindi	Z1	Marapco	65	Perkins Engines (UK)	2014
30	NDANDA	Lindi	Z1	APM	30	Perkins Engines (UK)	2019
31	RUANGWA	Lindi	Z1	Marapco	65	Perkins Engines (UK)	2015

32	MWANAKWEREKWE	Mjini Magharibi	Z1	AJ Power	65	Perkins Engines (UK)	2004
33	ZANZIBAR	Mjini Magharibi	Z1	Marapco	100	Perkins Engines (UK)	2010
34	MASASI	Mtwara	Z1	African Power Machinery	60	Perkins Engines (UK)	2020
35	MTWARA	Mtwara	Z1	Marapco	100	Perkins Engines (UK)	2012
36	NANYUMBU	Mtwara	Z1	Olympian Power Systems	60	Perkins Engines (UK)	2006
37	NEWALA	Mtwara	Z1	Marapco	80	Perkins Engines (UK)	2012
38	TANDAHIMBA	Mtwara	Z1	Marapco	65	Perkins Engines (UK)	2015
39	MLANDIZI	Pwani	Z1	Marapco	30	Perkins Engines (UK)	2014
40	BAGAMOYO	Pwani	Z1	Marapco	80	Perkins Engines (UK)	2011
41	CHALINZE	Pwani	Z1	Marapco	80	Perkins Engines (UK)	2015
42	KIBAHA	Pwani	Z1	Marapco	80	Perkins Engines (UK)	2011
43	KIBITI	Pwani	Z1	Marapco	65	Perkins Engines (UK)	2014
44	KISARAWA	Pwani	Z1	Marapco	200	Perkins Engines (UK)	2013
45	MAFIA	Pwani	Z1	Marapco	66	Perkins Engines (UK)	2013
46	MKURANGA	Pwani	Z1	Marapco	65	Perkins Engines (UK)	2016
47	BUMBULI	Tanga	Z1	African Power Machinery	30	Perkins Engines (UK)	2020
48	HANDENI	Tanga	Z1	Marapco	65	Perkins Engines (UK)	2015
49	HOROHORO	Tanga	Z1	GB Power	30	Perkins Engines (UK)	2018
50	KILINDI	Tanga	Z1	African Power Machinery	30	Perkins Engines (UK)	2017
51	KOROGWE	Tanga	Z1	Marapco	80	Perkins Engines (UK)	2011
52	LUSHOTO	Tanga	Z1	Marapco	65	Perkins Engines (UK)	2014
53	MADARAKA	Tanga	Z1	Olympian Power Systems	100	Perkins Engines (UK)	2004
54	MKATA	Tanga	Z1	African Power Machinery	30	Perkins Engines (UK)	2020
55	MKINGA	Tanga	Z1	African Power Machinery	30	Perkins Engines (UK)	2020
56	MOMBO	Tanga	Z1	Marapco	65	Perkins Engines (UK)	2015
57	MUHEZA	Tanga	Z1	Marapco	66	Perkins Engines (UK)	2013
58	PANGANI	Tanga	Z1	Marapco	65	Perkins Engines (UK)	2015
59	Mtwara Business Center	Mtwara	Z1	Marapco	100	Perkins Engines (UK)	2012
60	KISARAWA	Pwani	Z1	Olympian Power Systems	220	Perkins Engines (UK)	2008
61	MUHIMBILI	Dar es Salaam	Z1	African Power Machinery	30	Perkins Engines (UK)	2020
62	PUGU CCP	Dar es Salaam	Z1	GB Power	30	Perkins Engines (UK)	2018
63	Mbezi Louis	Dar es Salaam	Z1	African Power Machinery	100	Perkins Engines (UK)	2019
64	RUFJI CCP	Pwani	Z2	Cummins	20	Cummins	

Zone 2:

No	BRANCH NAME	REGION	ZONE	MANUFACTURER	CAPACITY (kVA)	MAKE	Y/PUR
1	BAHI	Dodoma	Z2	Olympian Power Systems	30	Perkins Engines (UK)	2004
2	BUNGE	Dodoma	Z2	Marapco	30	Perkins Engines (UK)	2014
3	CHAMWINO	Dodoma	Z2	Olympian Power Systems	30	Perkins Engines (UK)	2004
4	DODOMA PSPF (Kambarage)	Dodoma	Z2	GB Power	100	Perkins Engines (UK)	2018
5	KIBAIGWA	Dodoma	Z2	Marapco	65	Perkins Engines (UK)	2014
6	KONDOA	Dodoma	Z2	Olympian Power Systems	30	Perkins Engines (UK)	2004
7	KONGWA	Dodoma	Z2	African Power Machinery	100	Perkins Engines (UK)	2020
8	MAZENGO	Dodoma	Z2	Marapco	80	Perkins Engines (UK)	2015
9	MPWAPWA	Dodoma	Z2	Marapco	80	Perkins Engines (UK)	2015
10	UDOM	Dodoma	Z2	Marapco	100	Perkins Engines (UK)	2012
11	ILULA	Iringa	Z2	Olympian Power Systems	30	Perkins Engines (UK)	2004
12	IRINGA II (RUAHA)	Iringa	Z2	Marapco	65	Perkins Engines (UK)	2015
13	UVINZA	Kigoma	Z2	Olympian Power Systems	30	Perkins Engines (UK)	2004
14	KILOLO	Iringa	Z2	Olympian Power Systems	20	Perkins Engines (UK)	2009
15	MAFINGA	Iringa	Z2	Marapco	65	Perkins Engines (UK)	2014
16	MKWAWA	Iringa	Z2	Marapco	80	Perkins Engines (UK)	2012
17	MLELE	Katavi	Z2	Olympian Power Systems	20	Perkins Engines (UK)	2009
18	MPANDA	Katavi	Z2	Marapco	65	Perkins Engines (UK)	2015
19	KAKONKO	Kigoma	Z2	Olympian Power Systems	30	Perkins Engines (UK)	2004
20	KASULU	Kigoma	Z2	Marapco	65	Perkins Engines (UK)	2011
21	KIBONDO	Kigoma	Z2	Olympian Power Systems	80	Perkins Engines (UK)	2004
22	KIGOMA	Kigoma	Z2	Marapco	80	Perkins Engines (UK)	2013
23	BUSOKELO	Mbeya	Z2	Perkins FG Wilsons	10	Perkins Engines (UK)	2011
24	TUNDUMA CCP	Mbeya	Z2	GB Power	30	Perkins Engines (UK)	2018
25	CHUNYA	Mbeya	Z2	Marapco	65	Perkins Engines (UK)	2015
26	ILEJE	Mbeya	Z2	Marapco	65	Perkins Engines (UK)	2011
27	KYELA	Mbeya	Z2	Marapco	65	Perkins Engines (UK)	2013
28	MBALIZI ROAD	Mbeya	Z2	Marapco	100	Perkins Engines (UK)	2004
29	MBARALI	Mbeya	Z2	Marapco	65	Perkins Engines (UK)	2015
30	MBOZI	Mbeya	Z2	Marapco	65	Perkins Engines (UK)	2014
31	MLOWO	Mbeya	Z2	Marapco	65	Perkins Engines (UK)	2015
32	MOUNT LOLEZA	Mbeya	Z2	Olympian Power Systems	30	Perkins Engines (UK)	2006
33	MWANJELWA	Mbeya	Z2	Marapco	65	Perkins Engines (UK)	2015
34	TUKUYU	Mbeya	Z2	Olympian Power Systems	65	Perkins Engines (UK)	2006
35	TUNDUMA	Mbeya	Z2	Marapco	65	Perkins Engines (UK)	2015
36	USONGWE	Mbeya	Z2	Marapco	80	Perkins Engines (UK)	2010

37	UYOLE	Mbeya	Z2	African Power Machinery	30	Perkins Engines (UK)	2004
38	GAIRO	Morogoro	Z2	Marapco	65	Perkins Engines (UK)	2015
39	IFAKARA	Morogoro	Z2	GB Power	100	Perkins Engines (UK)	2018
40	MOROGORO BC	Morogoro	Z2	GB Power	100	Perkins Engines (UK)	2018
41	KILOMBERO	Morogoro	Z2	Olympian Power Systems	100	Perkins Engines (UK)	2009
42	KILOSA	Morogoro	Z2	Marapco	80	Perkins Engines (UK)	2013
43	MAHENGE	Morogoro	Z2	Marapco	65	Perkins Engines (UK)	2014
44	MOUNT ULUGURU	Morogoro	Z2	Marapco	80	Perkins Engines (UK)	2010
45	MSAMVU	Morogoro	Z2	GB Power	45	Perkins Engines (UK)	2017
46	MVOMERO	Morogoro	Z2	Olympian Power Systems	20	Perkins Engines (UK)	2009
47	TURIANI	Morogoro	Z2	Marapco	65	Perkins Engines (UK)	2013
48	WAMI	Morogoro	Z2	Olympian Power Systems	100	Perkins Engines (UK)	2004
49	LUDEWA	Njombe	Z2	Marapco	65	Perkins Engines (UK)	2015
50	MAKAMBAKO	Njombe	Z2	Marapco	65	Perkins Engines (UK)	2015
51	MAKETE	Njombe	Z2	Marapco	65	Perkins Engines (UK)	2015
52	NJOMBE	Njombe	Z2	Olympian Power Systems	65	Perkins Engines (UK)	2008
53	LAELA	Rukwa	Z2	African Power Machinery	30	Perkins Engines (UK)	2004
54	Kalambo-MATAI	Rukwa	Z2	Olympian Power Systems	30	Perkins Engines (UK)	2004
55	NKASI	Rukwa	Z2	Marapco	65	Perkins Engines (UK)	2017
56	SUMBAWANGA	Rukwa	Z2	Marapco	80	Perkins Engines (UK)	2010
57	LITEMBO	Ruvuma	Z2	African Power Machinery	30	Perkins Engines (UK)	2017
58	MADABA	Ruvuma	Z2	Olympian Power Systems	30	Perkins Engines (UK)	2004
59	MBINGA	Ruvuma	Z2	African Power Machinery	65	Perkins Engines (UK)	2019
60	NAMTUMBO	Ruvuma	Z2	Marapco	65	Perkins Engines (UK)	2015
61	SONGEA	Ruvuma	Z2	Marapco	80	Perkins Engines (UK)	2012
62	TUNDURU	Ruvuma	Z2	African Power Machinery	30	Perkins Engines (UK)	2017
63	IKUNGI	Singida	Z2	African Power Machinery	30	Perkins Engines (UK)	2020
64	ITIGI	Singida	Z2	Marapco	65	Perkins Engines (UK)	2010
65	KIOMBOI	Singida	Z2	Marapco	65	Perkins Engines (UK)	2015
66	MANYONI	Singida	Z2	Marapco	65	Perkins Engines (UK)	2015
67	MKALAMA	Singida	Z2	African Power Machinery	30	Perkins Engines (UK)	2004
68	SINGIDA	Singida	Z2	Marapco	80	Perkins Engines (UK)	2013
69	MKWAJUNI	Songwe	Z2	Marapco	30	Perkins Engines (UK)	2017
70	IGUNGA	Tabora	Z2	Olympian Power Systems	65	Perkins Engines (UK)	2008
71	KALIUA	Tabora	Z2	Marapco	65	Perkins Engines (UK)	2014
72	MIHAYO	Tabora	Z2	Marapco	100	Perkins Engines (UK)	2012
73	NZEGA	Tabora	Z2	Olympian Power Systems	80	Perkins Engines (UK)	2004
74	SIKONGE	Tabora	Z2	Marapco	65	Perkins Engines (UK)	2015

75	URAMBO	Tabora	Z2	Marapco	65	Perkins Engines (UK)	2015
76	MAKOLE BUSINESS CENTER	Dodoma	Z2	Marapco	65	Perkins Engines (UK)	
77	WANGING'OMBE	Njombe	Z2	African Power Machinery	30	Perkins Engines (UK)	2020
78	MITUNDU	Singida	Z2	GB Power	30	Perkins Engines (UK)	2017
79	Nkinga	Tabora	Z2	Olympian Power Systems	30	Perkins Engines (UK)	
80	DODOMA	Dodoma	Z2	Olympian Power Systems	100	Perkins Engines (UK)	2004
81	NYASA	Ruvuma	Z2	GB Power	30	Perkins Engines (UK)	2018
82	MLIMBA	Morogoro	Z2	African Power Machinery	30	Perkins Engines (UK)	2019
83	MALINYI	Morogoro	Z2	Marapco	80	Perkins Engines (UK)	2012

Zone 3:

No	BRANCH NAME	REGION	ZONE	MANUFACTURER	CAPACITY (kVA)	MAKE	Y/PUR
1	ARUSHA DISTRICT COUNCIL	Arusha	Z3	Olympian Power Systems	22	Perkins Engines (UK)	2009
2	ARUSHA MARKET	Arusha	Z3	Marapco	80	Perkins Engines (UK)	2010
3	ARUSHA PALACE	Arusha	Z3	Marapco	100	Perkins Engines (UK)	2011
4	CLOCK TOWER	Arusha	Z3	Olympian Power Systems	100	Perkins Engines (UK)	2004
5	KARATU	Arusha	Z3	Marapco	65	Perkins Engines (UK)	2015
6	LOLIONDO	Arusha	Z3	Olympian Power Systems	30	Perkins Engines (UK)	2004
7	MONDULI	Arusha	Z3	Marapco	30	Perkins Engines (UK)	2015
8	MTO WA MBU	Arusha	Z3	Olympian Power Systems	30	Perkins Engines (UK)	2004
9	NAMANGA (Longido)	Arusha	Z3	Marapco	65	Perkins Engines (UK)	2012
10	NGARAMTONI	Arusha	Z3	Olympian Power Systems	30	Perkins Engines (UK)	2004
11	NGARENARO	Arusha	Z3	Olympian Power Systems	30	Perkins Engines (UK)	2006
12	USA RIVER	Arusha	Z3	Marapco	80	Perkins Engines (UK)	2013
13	CHATO	Geita	Z3	Marapco	65	Perkins Engines (UK)	2015
14	GEITA	Geita	Z3	Marapco	110	Perkins Engines (UK)	2012
15	KATORO	Geita	Z3	African Power Machinery	30	Perkins Engines (UK)	2004
16	BIHARAMULO	Kagera	Z3	F.G Wilson	65	Perkins Engines (UK)	2013
17	(KAITABA) BUKOBA II	Kagera	Z3	Marapco	80	Perkins Engines (UK)	2017
18	KAYANGA	Kagera	Z3	F.G Wilson	65	Perkins Engines (UK)	2013
19	KYERWA	Kagera	Z3	Olympian Power Systems	20	Perkins Engines (UK)	2009
20	MISENYI	Kagera	Z3	Marapco	65	Perkins Engines (UK)	2015
21	NKWENDA	Kagera	Z3	Olympian Power Systems	30	Perkins Engines (UK)	2004
22	MULEBA	Kagera	Z3	Marapco	65	Perkins Engines (UK)	2015
23	NGARA	Kagera	Z3	Olympian Power Systems	80	Perkins Engines (UK)	2004
24	Rusumo	Kagera	Z3	Olympian Power Systems	20	Perkins Engines (UK)	2009
25	HAI	Kilimanjaro	Z3	Marapco	80	Perkins Engines (UK)	2015

26	HIMO	Kilimanjaro	Z3	Marapco	80	Perkins Engines (UK)	2011
27	MAWENZI	Kilimanjaro	Z3	GB Power	65	Perkins Engines (UK)	2017
28	MBUYUNI	Kilimanjaro	Z3	Marapco	65	Perkins Engines (UK)	2017
29	MWANGA	Kilimanjaro	Z3	Marapco	65	Perkins Engines (UK)	2015
30	NELSON MANDELA	Kilimanjaro	Z3	Olympian Power Systems	150	Perkins Engines (UK)	2004
31	ROMBO	Kilimanjaro	Z3	Marapco	65	Perkins Engines (UK)	2015
32	SAME	Kilimanjaro	Z3	Olympian Power Systems	30	Perkins Engines (UK)	2004
33	SANYA JUU (SIHA)	Kilimanjaro	Z3	Marapco	60	Perkins Engines (UK)	2014
34	TARAKEA	Kilimanjaro	Z3	Marapco	65	Perkins Engines (UK)	2015
35	BABATI	Manyara	Z3	Olympian Power Systems	80	Perkins Engines (UK)	2004
36	HAYDOM	Manyara	Z3	Marapco	30	Perkins Engines (UK)	2017
37	KATESH	Manyara	Z3	Marapco	80	Perkins Engines (UK)	2015
38	KIBAYA	Manyara	Z3	Olympian Power Systems	30	Perkins Engines (UK)	2004
39	MBULU	Manyara	Z3	Marapco	65	Perkins Engines (UK)	2015
40	MERERANI	Manyara	Z3	African Power Machinery	60	Perkins Engines (UK)	2020
41	BUNDA	Mara	Z3	Marapco	80	Perkins Engines (UK)	2015
42	SIMANJIRO	Manyara	Z3	Olympian Power Systems	20	Perkins Engines (UK)	2009
43	BUTIAMA	Mara	Z3	African Power Machinery	30	Perkins Engines (UK)	2020
44	MUGUMU	Mara	Z3	Marapco	65	Perkins Engines (UK)	2015
45	MUSOMA	Mara	Z3	Marapco	80	Perkins Engines (UK)	2012
46	NYAMONGO	Mara	Z3	Olympian Power Systems	27	Perkins Engines (UK)	2004
47	OLD MUSOMA	Mara	Z3	African Power Machinery	30	Perkins Engines (UK)	2020
48	RORYA	Mara	Z3	Marapco	65	Perkins Engines (UK)	2015
49	SIRARI	Mara	Z3	GB Power	65	Perkins Engines (UK)	2017
50	TARIME	Mara	Z3	GB Power	65	Perkins Engines (UK)	2018
51	BUZULUGA	Mwanza	Z3	Marapco	80	Perkins Engines (UK)	2013
52	IGOMA	Mwanza	Z3	GB Power	65	Perkins Engines (UK)	2017
53	ILEMELA	Mwanza	Z3	Olympian Power Systems	30	Perkins Engines (UK)	2006
54	KENYATTA ROAD	Mwanza	Z3	Olympian Power Systems	100	Perkins Engines (UK)	2004
55	MAGU	Mwanza	Z3	Marapco	65	Perkins Engines (UK)	2015
56	MISUNGWI	Mwanza	Z3	Olympian Power Systems	65	Perkins Engines (UK)	2008
57	NANSIO	Mwanza	Z3	GB Power	65	Perkins Engines (UK)	2017
58	NGUDU	Mwanza	Z3	Marapco	65	Perkins Engines (UK)	2015
59	PAMBA	Mwanza	Z3	Marapco	100	Perkins Engines (UK)	2017
60	PPF PLAZA MWANZA	Mwanza	Z3	Olympian Power Systems	30	Perkins Engines (UK)	2004
61	ROCKY CITY	Mwanza	Z3	Marapco	65	Perkins Engines (UK)	2017
62	RORYA DISTRICT COUNCIL	Mwanza	Z3	African Power Machinery	30	Perkins Engines (UK)	2020
63	SENGEREMA	Mwanza	Z3	Marapco	65	Perkins Engines (UK)	2015

64	BUKOMBE	Shinyanga	Z3	Marapco	65	Perkins Engines (UK)	2015
65	KAHAMA	Shinyanga	Z3	Olympian Power Systems	80	Perkins Engines (UK)	2004
66	KISHAPU	Shinyanga	Z3	Marapco	65	Perkins Engines (UK)	2014
67	MAGANZO	Shinyanga	Z3	Olympian Power Systems	60	Perkins Engines (UK)	2004
68	MANONGA	Shinyanga	Z3	Olympian Power Systems	75	Perkins Engines (UK)	2004
69	MWADUI	Shinyanga	Z3	African Power Machinery	30	Perkins Engines (UK)	2020
70	MWANHUZI	Shinyanga	Z3	Marapco	65	Perkins Engines (UK)	2015
71	BARIADI	Simiyu	Z3	Marapco	65	Perkins Engines (UK)	2014
72	ITILIMA	Simiyu	Z3	Olympian Power Systems	30	Perkins Engines (UK)	2004
73	MASWA	Simiyu	Z3	Marapco	65	Perkins Engines (UK)	2014
74	USHETU	Shinyanga	Z3	African Power Machinery	30	Perkins Engines (UK)	2020
75	Kahama Business Center	Shinyanga	Z3	Olympian Power Systems	60	Perkins Engines (UK)	
76	Hedaru	Kilimanjaro	Z3	Olympian Power Systems	30	Perkins Engines (UK)	
77	Mutukula	Kagera	Z3	GB Power	30	Perkins Engines (UK)	2017
78	Nyang'wale	Shinyanga	Z3	Olympian Power Systems	30	Perkins Engines (UK)	2004
79	Kabanga	Kagera	Z3	GB Power	30	Perkins Engines (UK)	2018
80	Holili	Kagera	Z3	African Power Machinery	30	Perkins Engines (UK)	2018
81	Mbogwe	Shinyanga	Z3	African Power Machinery	30	Perkins Engines (UK)	2018
82	Busega	Shinyanga	Z3	African Power Machinery	30	Perkins Engines (UK)	2019
83	MERERANI CCP	Manyara	Z3	African Power Machinery	30	Perkins Engines (UK)	2020

1.1 Preventive Maintenance

The scope of preventive maintenance is to provide regular service on all the generators in order to reduce the risk of break down and/or failure. The Service Provider shall provide preventive maintenance services as per manufacturer recommendations for all generators.

A detailed and comprehensive list of tasks and activities that the Service Provider will perform during all the recommended Preventive Maintenance period is furthermore described in section 2.

The Service Provider is required to provide annual preventive maintenance cost per each zone also indicate PM cost breakdown per site as below.

ANNUAL PREVENTIVE MAINTENANCE COST BREAKDOWN PER GENERATOR							
Item	Unit Price	Qty	PM1	PM2	PM3	PM4	Total Annual Cost
Fuel Filter							
Oil Filter							
Air Filter							
Engine Oil							
Coolant							
Labor, Transport, Accommodation & Miscellaneous expenses							
Total							
**PM1 and PM3: Replace all filters, engine oil and coolant. Flush and clean radiator							
**PM2 and PM4: Replace all filters except Air filter. Replace engine oil (do not replace coolant)							

1.2 Support

The scope of support is to provide preventive maintenance and corrective maintenance in case of generator failure or malfunction or any other support related to the generator.

Service provider required to have teams stationed at the Zones for quick deployment in the case of equipment failure.

2. PLANNED PREVENTATIVE MAINTENANCE

The preventive maintenance schedule for all systems shall be done on quarterly basis and the tasks will be as per the attached checklist.

Maintenance is typically performed at the following frequencies:

- Quarterly or after every 250 run-hours whichever comes first
- Semi Annually
- Annually

The maintenance services for all the generators shall be carried out by qualified personnel who are authorized by respective equipment manufacturers. At the minimum, the following maintenance tasks shall be carried out during each Preventive maintenance cycle.

Preventive Maintenance Checklist

Part 1. General Facilities & Janitorial PM			
S/n	Items to be Checked	OK/ NOT OK	Remarks
1	Check for diesel/oil contamination		
2	Remove all rubbish/unauthorized material		
3	Is Local Record Card and PM sheet Present		
4	Check/remove infestation of wasps/termites etc.		
5	Check condition of site earthing/bonding points		
6	Clean Generator and generator shed		
Part 2. AC Power (Generator Stopped)			
S/n	Items to be Checked	OK/ NOT OK	Remarks
1	Is Generator canopy Secure/Locked		
2	Change Engine Oil		
3	Flush and clean radiator, Fill new coolant (For PM1 and PM3). Clean Radiator on the outside (For PM2 and PM4)		
4	Replace Air Filter (For PM1 and PM3)		
5	Check for Oil or Coolant leaks from Engine and repair/ report		
6	Replace Engine Oil Filters (Scratch current date and run hours on new filters)		
7	Check Condition of all belts and hoses		
8	Inspect/ Secure radiator fan guard		
9	Replace Air Filter (Scratch current date and run hours on new filters)		
10	Check Condition of Grid Supply/Phases/Fuses		
11	Check Condition of Fuel Tank including Fuel gauge. Check fuel lines and clamps		
12	Replace Fuel filters (Scratch current date and run hours on the new filters)		
13	Check Starter Battery (including terminals)/Trickle Charger and record voltage		
14	Visual inspection of all AC cables/fuses/MCB's etc.		
15	Check Generator Control Panel for Alarms		
Part 3. AC Power (Generator Running)			
S/n	Items to be Checked	OK/ NOT OK	Remarks
1	Check generator auto start		
3	Check for excessive noise/vibration/fumes/smoke		

4	Check for any coolant/oil leaks while running		
5	Check Generator Control Panel for Phase o/p		
6	Record Generator run hours		
7	Check Control Panel for next service due in...		
8	Restore Grid, check for generator auto stop		

Part 4. Recorded Matrix and Remarks

S/n	Items to be Checked	OK/ NOT OK			
1	Grid Power Readings		Voltage	Frequency	Load (Amps)
	Phase 1 (Red)				
	Phase 2 (Yellow)				
	Phase 3 (Blue)				
	Neutral				
2	Generator Output		Voltage	Frequency	Load (Amps)
	Phase 1				
	Phase 2				
	Phase 3				
	Neutral				
3	Generator Starter Battery		Voltage		
4	Battery Float Voltage (When stopped and while running)		Voltage		

3. SPARE PARTS

The SP will provide new genuine materials and spare parts in order to meet their obligation under this Agreement. The spare parts will be used to Install new systems and replace faulty ones to minimize downtime at the indicated rates. SP required to verify/update spares list below and provide price of each item.

Spare parts and other services price list

SPARE PARTS PRICE LIST								
S/N	(Unit price in TZS VAT exclusive)	GENERATOR SIZE						
		20kVA	30kVA	45kVA	60kVA	80kVA	100kVA	220kVA
1	Main AC Alternator							
2	Fanbelt							
3	Alternator Belt							
4	Starter Motor							
5	Mechanical Fuel Pump							

6	Injection Pump							
7	Water pump							
8	Radiator							
9	Charging Alternator							
10	Battery							
11	Battery Charger							
12	AVR							
13	Atomiser Kit							
14	Big End Bearing							
15	Main Bearing							
16	Overhaul Kit							
17	Inlate valve							
18	Rocker cover Joint							
19	Thermostat kit							
20	Valve spring inner							
21	Valve spring outer							
22	Atmospheric Pressure sensor kit							
23	Cam speed sensor kit							
24	Crank speed sensor kit							
25	Manifold air pressure sensor kit							
26	Manifold air temp sensor kit							
27	Oil pressure sensor kit							
28	Low oil pressure switch/ sender							
29	high water temperature switch/ sender							
30	Diode assembly							
31	Surge Supressor							
32	Front Oil Seal							
33	Rear Oil Seal							
34	Crankshaft gear							
35	Fuel Selonoid							
36	Turbo Charger							
37	Flexible Fuel Pipe (per meter)							
38	Fuel level sensor							
39	Radiator Hose Pipe							
40	Engine Control Module (ECM)							
41	Engine Interface Module							
42	Electric primary Fuel lift pump							
43	Manual primary Fuel lift pump							

44	Primary fuel filter lift pump assembly							
45	Concrete Slab (per cubic meter)							
46	Motorized ATS							
47	ATS motor							
48	DSE ATS controller							
49	Contactors ATS							
50	ATS Contactor							
51	Mechanical Interlock							
52	Phase Control relay							
53	Power Wizard generator controller							
54	DSE generator controller							
55	Radiator Cap							
56	Exhaust pipe extension cost							
57	Armoured cable 16 sqmm, 4 Core (per meter)							
58	Armoured cable 25 sqmm, 4 Core (per meter)							
59	Armoured cable 35 sqmm, 4 Core (per meter)							
60	Armoured cable 50 sqmm, 4 Core (per meter)							
61	Earth wire, 10 sqmm (per meter)							
62	Earth wire, 16 sqmm (per meter)							
63	Earth wire, 25 sqmm (per meter)							
64	Earth wire, 35 sqmm (per meter)							
65	Earth wire, 50 sqmm (per meter)							
66	Earth wire, 70 sqmm (per meter)							
67	Earth pit excavation and soil treatment							
68	Earth pit construction (Including cover)							
69	Earth Rod, 12 sqmm (Pure solid copper)							
70	Earth Rod, 16 sqmm (Pure solid copper)							
71	Main AC Alternator rewinding cost							
72	Fabricated radiator							
73	230V AC Relay							
74	12/24V DC Relay							
75	230V AC Timer relay							
76	Flexible pipe (exhaust)							
77	Conduit pipe, 3/4 Inch							
78	SPD (40kA, Three phase)							
79	Flexible Cable, 2.5 sqmm 4 core							
80	Flexible Cable, 2.5 sqmm 8 core							
81	Battery Terminal Set							

82	Cylinder Head gasket							
83	Generator Rental Rates (Inclusive of Installation charges but exclusive of Transportation)							
84	Call Out Charge Zone 1							
85	Call Out Charge Zone 2							
86	Call Out Charge Zone 3							
87	Generator Transportation Cost/Km							

4. OTHER REQUIREMENTS

- SP is required to Submit CVs for Engineers and Technicians
- SP Engineers and Technicians should possess at least Class C EWURA Licenses
- Company must be CRB registered
- Experience – At least three contracts of similar nature (references should be provided)
- MAF – SP is required to possess Perkins MAF
- SP must provide methodology on support delivery
- SP must indicate Escalation Matrix
- SP MUST have local base

ABBREVIATIONS & DEFINITIONS

PPM	Planned Preventative Maintenance
PM	Preventive Maintenance
SP	Service Provider
EWURA	Energy and Water Utilities Regulatory Authority