



Etisalat Afghanistan Tender for BTS Sites Fuel & Power
Monitoring, with Reports Generations

REMOTE MONITORING SYSTEM (RMS)

RFP#

EA/02-59-2023

Date:

January-01-2024



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1 Introduction

1.1 Remote Monitoring System (RMS) Objectives

The object of RMS is to have a standard monitoring system for EA 200 Telecom BTS sites to monitor and in some cases control the fuel plan, delivery, consumption its level and miss-use, also the system is expected to indicate power status of the sites which comprise its energy consumption (kWH), its load on each phase, status of phase imbalances, its miss-use and also to show status of energy technologies (City Power, Solar, Super Cap, Batteries Hybrid. Etc.) for its operation, energy generation, Diesel Generators Running Hours, its miss-use indication as well as status of batteries for its operation. The system is required to generate comprehensive reporting for fuel planning, fuel scheduling and fuel budgeting which could fulfil departmental needs of better control and reporting to management.

All above should result in minimizing fuel expenditure, optimize fuel opex, improve energy consumption, minimize energy losses, optimize generator efficiency, maximize uptime and network SLA, Generate professional reporting in exile and graphical format for better planning.

1.2 Proposal Structure

The proposal document is composed of seven (4) parts and (3) annexes as follows:

Part One: Fuel Monitoring Requirement

Part Two: Power & Energy Technologies Monitoring

Part Three: Report Generation

Part Four: General Scope of Work

Annex 1: Sites list
Annex 2: Sketch of sample Fuel Tank
Annex 3: Report Patterns and Tables

2 RMS OVERVIEW FOR 200 SITES OF EA

The RMS is required to increase the visibility of EA telecom operation through an IoT (Internet on Thing) system and cover fuel and electricity challenges where fuel level, consumption, theft and tampering are field challenges, in electrical part its consumption details, power source visibility, power quality and environment alert is a challenge to address along with comprehensive report generation.

The initial 200 Sites selected are in different provinces of the country, their DG types, Technology Types and Fuel Tanks size are given the detailed list, the list given for some extra sites to cover field challenges for 200-sites only.

2.1 RMS FOR FUEL MONITORING TO SHOW

The RMS for fuel monitoring to show below key parameters per tank but not limited to it,

1. Fuel Existing Level (in Liters and mm)
2. Delivered or refuelling volume (in Liters and mm).
3. Define Fuel Dead-volume, (Critical, Major and Minor)
4. Fuel Tampering and Theft indication
5. Consumption per hour
6. At least 99% +-1%% accuracy of fuel level/delivery/dead level/etc. for EA all Types of Fuel Tanks (standard and non-standard)
7. Must have alarm notifications or alert via SMS, WhatsApp, E-mail, Global NOC
8. All alarms must be instantly popped up and highlighted for follow up of trapping.

2.2 RMS FOR POWER MONITORING TO SHOW

The system platform to show all key parameters of Power & Environment for BTS sites for its efficient control on exactive and different hirericy dashboards and send alarm

2.2.1 DG & CP Parameters:

1. Load on each phase (A)
2. Power unbalancing on phases as alarm
3. Abnormal Power consumption as alarm notifications or alert via SMS, WhatsApp, E-mail, Global NOC
4. DG Running Hours
5. Power Source kWh, especially in Grid-Power
6. Remote Start/Stop of DG
7. Monitor status, and operational efficiency of backup generators.
8. Monitor energy consumption, power cycle, power failure, and city power downtime.

2.2.2 Solar & Battery Hybrid Parameters to monitor:

1. Solar RH
2. Cyclic Batteries RH
3. Solar Fail to perform.
4. Cyclic Batteries Fail to perform.
5. Cyclic Batteries individual Status
6. Energy Generation kWh of Solar
7. Energy Generation kWh of Cyclic Batteries
8. Solar PWR & BTS PWR indication at once
9. AGM/Stand-by Batteries Cyclic Use Management
10. Monitor health, charge levels, and performance of backup battery systems.
11. Monitor solar panels and related components for energy production.
12. Etc.

2.3 REPORT GENERATION FROM RMS

2.3.1 For Financial Analysis To Generate Below Reports:

1. Site wise Fuel cost along with Site Code, Site Type (Owned, Shared etc.), Region, Province, Power Status, DG Type, DG Capacity, DG RH, Fuel Consumption Liter, Fuel Consumption AFN



Reports Template.xlsx

2. Monthly Accounting Entries and Site wise break up for fuel consumption AFN & Liters.



Fuel Working for
Finance Oct 2023.xlsx



Sites Level Break Up
(Fuel) Oct 2023.xlsx

3. Consumption Liter, Consumption AFN, Consumption based on Power Status, Consumption based on Region, Number of Sites/Locations, as per below category.

Site Category

- a. Sites
- b. BSCs
- c. MSCs
- d. Offices
- e. Guest Houses
- f. Flagships
- g. Mini Shops

Power Status Category

1. DG
2. DG+CP
3. DG+ACB
4. DG+SCAP
5. DG+SP

Region Category

- a. Central
- b. East
- c. North
- d. South
- e. West

- 4. Vendor wise report, deliver fuel in Liters and cost in AFN
- 5. Price Per Liter as per below category.

- I. Central
- II. East
- III. North
- IV. South
- V. West

- 6. Option to export (above all mention reports) to MS Excel

2.3.2 For Technical Planning to Show:

- The report format must have minimum below or more effective excel format to cover sites detail for fuel planning purpose.

#	Site ID	Power Source	Date	R-I (A)	Y-I (A)	B-I (A)	Total KW	kWH	Liter	mm	Fuel Consumption (L/H)	Fuel Consumption Monthly	Alarm	Cumulative DG RH	Daily DG RH	Monthly DG RH
1	KBL001	DG+CP	16-09-2023	6	6	5	3.8	15298.7	997	579	2.5		Low Fuel	2301:42:42	13	390

2.3.3 General about Reports:

- Reports must have a graphic presentation.
- RMS report must have management dashboard as summary and detailed reports on individual sites of all hierarchies.
- Management Dashboard should have summary report of power source, fuel level and energy consumption.
- The Monitoring System must have the capability of extracting all sites report at once and as individual both in Excell and other formats.
- Monitoring System should show all registered sites on single dashboard.
- A monitoring system must have the capability of modification to work or adjust on customer field demand for report creation and downloading.
- The system should Fuel delivery schedule report generation capability.
- Use historical data to identify energy and fuel consumption trends for long-term planning.
- Should have Performance Benchmarking, compare current performance with historical data to assess improvements.

3 GENERAL SCOPE OF WORK

The System to also have below features.

- All indication online, IoT
- The system must have the key features of Real time monitoring, live alerts and notifications, remote control, data visualization, escalation matrix access
- Must have standard protocols.
- Calibration Accuracy tends to be 100%
- The RMS must be compatible with all types of EA available DGs with no change of control modules/screens
- The RMS must have license un-expiring with no limitation of its life, upgradation will be part of service provider as FoC.
- Service provider should share the Map or DWG & solution architecture of RMS connectivity along submission of their offer.
- Service provider must be experienced in the same field, with proof of experience.
- RMS Standard connection type i.e. GSM Data, LAN or...to mention.
- The system must have the capability of access level definition to each stakeholder i.e. finance, fuel planning, fuel delivery scheduling & security teams at their domain including full access.
- Comply with standards of Telecom applications.
- RMS must have Min. 6 Months data saving & feature for export in excel and report format.
- Reporting generation should contain hourly, daily, weekly & monthly extraction.
- A monitoring system must have the capability of modification to work or adjust on customer field demand.
- All abnormalities or anomalies must be popped up and summarized as alarm indication.
- Proposed brands of Hardware and Software of solution must be renowned, standard and established.
- Service Provider must arrange technical manuals for his Hardware and Software proposed items.
- Equipment and Software must have standard warranty of min. 1-Year, both service and equipment
- Service provider to make ready and share all good features of his RMS solution in a PPT. presentation.
- Service provider field hardware installation design must be protected from Site Security Guard or Other External body in order not to spoil or touched until and unless via a deliberate action.
- The system should have the capability to add CCTV cameras in future.
- Develop mobile apps for both Android and iOS platforms to provide remote access to monitoring data.
- Service provider must comply with EA (Etisalat Afghanistan) cyber security applicable rules and regulation set for monitoring.

- EA BTS sites comprise of DG+DG, DG+CP(City Power), DG+ Solar, DG + Super Cap or Batteries, etc.
- EA BTS sites in initial stage for 200-sites throughout the country.
- Bidder must give a comprehensive offer with no extra costs at later stages.

4 Lists:

4.1 Sites List with Addresses:

The list can vary based on field challenges and feasibilities if found.

S. No	Province	SiteCode	power sources..	DG1. Capacity	DG2. Capacity	Location adders site	Latitude	Longitude
1	Nangarhar	NGR021	DG& CP	GEP13	0	Reg Shamat khan	34.42466	70.43326
2	Nangarhar	NGR100	DG& CP	CAT22	0	Bez Ekmalati	34.408364	70.4685
3	Nangarhar	NGR123	DG& CP	GEP9	0	Qasaba, Alaye School	34.42855	70.46897
4	Nangarhar	NGR003	DG& CP	GEP22	0	Sorkhrod 2Saraka	34.44128	70.39803
5	Nangarhar	NGR025	DG& CP	GEP22	0	Amniat Meli	34.42642	70.44398
6	Nangarhar	NGR027	DG& CP	GEP22	0	Narange Bagh	34.41857	70.43957
7	Nangarhar	NGR105	DG& CP	GEP22	0	Campona	34.440345	70.462272
8	Nangarhar	NGR114	DG& CP	CAT22	0	Chiknawri	34.441109	70.42186
9	Nangarhar	NGR017	DG& CP	GEP22	0	Qasaba, Char Asia	34.423606	70.480446
10	Nangarhar	NGR109	DG& CP	GEP22	0	Ghawchak	34.427699	70.419281
11	Kabul	KBL200	DG& CP	GEP22	0	Naiz Big sarak company	34.5204	69.0913
12	Kabul	KBL393	DG& CP	CAT22	0	Tank-e Tel barchi	34.50055	69.07507
13	Kabul	KBL304	DG& CP	GEP13	0	Shah rake Mirwias mina	34.47321	69.20409
14	Parwan	PRN027	DG& SC	GEP22	GEP22	Chardi	34.9951	68.74192
15	Nangarhar	NGR016	DG& CP	GEP22	0	Alikheel	34.441359	70.433107
16	Nangarhar	NGR053	DG& SC	GEP13	GEP9	Zhawara Village	34.23471	70.17378
17	Nangarhar	NGR008	DG& SC	GEP22	0	Kodikhel	34.24757	69.9698
18	Kabul	KBL067	DG& ACB	GEP22	0	Sarke Kabul Logar Safid_Sang	34.29622	69.14086

19	Kabul	KBL098	DG&CP	GEP22	GEP22	Char_Asia	34.36829	69.14081
20	Kabul	KBL136	DG&CP	GEP22	GEP22	Shakar Dara	34.695299	69.092768
21	Kabul	KBL168	DG&CP	GEP22	GEP22	Khoja_Lakan	34.55929	68.94746
22	Logar	LGR016	DG&SC	GEP22	GEP22	Bazar waghjan	34.15903	69.07135
23	Logar	LGR019	DG&SC	GEP22	GEP9	Baraki Barak Mamai vilage	33.941599	68.944121
24	Parwan	PRN019	DG&ACB	GEP22	0	Kalan Tala	34.78072	68.53548
25	Nangarhar	NGR004	DG&SC	GEP22	GEP22	Kandi Bagh	34.27556	70.38209
26	Nangarhar	NGR006	DG&DG	GEP22	GEP22	Dih Ghazi	34.42625	70.56391
27	Nangarhar	NGR018	DG&CP	GEP22	GEP22	Airport	34.4097	70.49375
28	Nangarhar	NGR028	DG&DG	GEP22	GEP22	Saracha	34.37366	70.54652
29	Nangarhar	NGR032	DG&SC	GEP22	GEP22	Batana Village	34.25283	71.03063
30	Nangarhar	NGR046	DG&SP	GEP13	0	Usman Kheel	34.19362	70.16407
31	Nangarhar	NGR049	DG&SC	GEP13	GEP13	Bala Bagh	34.38966	70.22807
32	Nangarhar	NGR057	DG&CP	GEP22	0	Ghawchak	34.43557	70.41544
33	Nangarhar	NGR107	DG&SC	GEP22	GEP22	Sayaf Family	34.379809	70.406742
34	Kuner	KNR003	DG&SC	GEP22	0	Shegal District	34.963686	71.261935
35	Kuner	KNR004	DG&SC	GEP22	GEP22	Markaz	34.874051	71.150354
36	Kuner	KNR013	DG&DG	GEP13	GEP22	Dandona	34.78366	71.0944
37	Logar	LGR006	DG&SC	GEP9	GEP9	Bandoka, near to Charkh bazar	33.8097	68.9481
38	Bamyan	BMY017	DG&DG	GEP22	GEP22	Aqrabat	34.972132	67.653212
39	Nangarhar	NGR034	DG&DG	GEP22	GEP22	Shamshad Hill	34.14283	71.05993
40	Logar	LGR012	DG&DG	GEP9	GEP9	Qal'a-i-Wardak, barake road	33.9677	68.96169
41	Kuner	KNR005	DG&DG	GEP13	GEP13	Chaghan Hill	34.88951	71.16135
42	Kabul	KBL333	DG&SC	GEP22	0	Chon Ghar Akhair Barchi	34.48335	69.00785
43	Nangarhar	NGR041	DG&SC	GEP22	GEP9	Qalai Khwajkan	34.26203	70.7337
44	Nangarhar	NGR061	DG&CP	GEP13	0	Reg Shamat khan	34.42226	70.45038
45	Kabul	KBL191	DG&CP	GEP22	0	Gul Bagh, Shahrak faisal	34.44287	69.13122
46	Kabul	KBL264	DG&SP	GEP22	0	Sarak 1 Shashahid	34.51134	69.19943

48	Kabul	KBL049	DG&CP	RID20	0	Darulaman road, Serahi_Alauddin	34.4887	69.13777
49	Ghazni	GZN032	DG&SC	GEP22	0	Naw Abad	33.5958	68.395435
50	Paktia	PKT006	DG&SC	GEP22	0	Near Chamkani bazar, Nawabad	33.80596	69.829911
51	Paktia	PKT009	DG&CP	GEP22	0	Khost Ada	33.5871	69.22957
52	Khost	KWT016	DG&SC	GEP22	0	Darmalaka	33.27636	69.86001
53	Paktia	PKT001	DG&SC	GEP22	0	Mangal village	33.713	69.38869
54	Wardak	WDK001	DG&CP	GEP22	0	Familly Midan	34.39189	68.862158
55	Khost	KWT004	DG&DG	GEP22	GEP22	Monai kalay	33.323586	69.910233
56	Khost	KWT010	DG&DG	GEP22	GEP22	Panikzee Lakan road	33.35941	70.00325
57	Khost	KWT012	DG&DG	GEP22	GEP22	Dar khana village	33.3146	69.75013
58	Khost	KWT015	DG&DG	GEP22	GEP22	Shiekhamir Kalay	33.2865	69.9129
59	Kabul	KBL293	DG&CP	GEP22	0	Sarke Kohi TV	34.52753	69.14716
60	Kabul	KBL017	DG&CP	RID20	0	tape Klola Poshta	34.53873	69.16363
61	Kabul	KBL039	DG&CP	GEP22	0	Charahee Sarsabze near to Qase Kabul weeding hall	34.55813	69.13795
62	Kabul	KBL228	DG&CP	GEP22	0	infront of Oranus Hotal	34.56673	69.17634
63	Kabul	KBL354	DG&CP	GEP13	0	Klola Poshta Road	34.53863	69.15739
64	Kabul	KBL150	DG&CP	GEP9	0	Char Rahi Gole surkh	34.54837	69.15195
65	Kabul	KBL249	DG&CP	RID20	0	Chrahe Saleem Karwan	34.55598	69.1586
66	Kabul	KBL053	DG&CP	RID20	0	Parwan 3 near to Qasre Zareen Hotle	34.54459	69.13495
67	Kabul	KBL412	DG&SC	GEP13	0	Monjai town	34.497664	69.384481
68	Kabul	KBL129	DG&CP	GEP22	0	Cement Khana Sark De khodaydad	34.52774	69.2113
69	Kabul	KBL134	DG&CP	GEP9	0	Qazi Piazza(Maccroyan Airport road)	34.54052	69.19627
70	Kabul	KBL266	DG&ACB	GEP22	0	Sarak naw Dispechari	34.55578	69.2504
71	Kabul	KBL290	DG&SC	GEP22	0	Cocacolla Company	34.50788	69.24431
72	Kabul	KBL314	DG&CP	RID20	0	Shahrak Amnyat	34.499887	69.295125
73	Kabul	KBL109	DG&SC	GEP13	0	4th macroyan near Shino zada Hspetal	34.541513	69.206631
74	Kabul	KBL258	DG&CP	GEP9	0	Arzan Qeemat Blocke 5 Saleem Karwan Bus Stop	34.52776	69.32981
75	Kabul	KBL223	DG&CP	GEP22	0	Sarke Poste Kachalow Khair Khana	34.59042	69.15577

76	Kabul	KBL089	DG&CP	GEP9	0	Kotale Chamtala	34.6007 31	69.07 725
77	Kabul	KBL105	DG&CP	GEP22	0	Hotel Parwan Khair Khana	34.5708 7	69.14 599
78	Kabul	KBL106	DG&CP	GEP22	0	Khair Khana do Jampa	34.5764 1	69.15 416
79	Kabul	KBL170	DG&CP	GEP22	0	Srai Shamali, airport road near sarke Haji Chaman	34.5630 5	69.12 92
80	Kabul	KBL174	DG&CP	GEP22	0	Khair Khana Labe Jar square airport 80 m road	34.5636 5	69.14 488
81	Kabul	KBL329	DG&CP	GEP22	0	Hessa 2 khairkhana Behind Laisay Mariam	34.5756 3	69.13 975
82	Kabul	KBL378	DG&ACB	GEP22	0	Shahrake Zakerin kochai22	34.5710 37	69.08 4896
83	Kabul	KBL380	DG&CP	GEP22	0	Layce Maryam Behind the Golay Park	34.5812 9	69.14 071
84	Kabul	KBL141	DG&CP	GEP13	0	Porojai Jaded Khhair khana Sarke Qasaba	34.5863 7	69.13 593
85	Kapisa	KPS005	DG&SP	GEP13	0	Esay dow Kohistan Karazai	35.0889 1	69.35 5449
86	Laghman	LGM011	DG&SC	GEP22	0	Parwayee	34.8637 6	70.38 299
87	Kabul	KBL035	DG&CP	GEP22	0	airport road	34.5604 1	69.19 662
88	Kabul	KBL135	DG&SC	GEP22	0	Shakar Dara	34.6981 7	69.05 35
89	Kabul	KBL140	DG&CP	GEP33	GEP22	Char qalah wazer abad	34.5578 9	69.17 604
90	Kapisa	KPS012	DG&SP	GEP22	0	Jamal Agha	35.0703 23	69.29 5281
91	Panjsher	PJR005	DG&ACB	GEP22	0	Tapi Shotol	35.2216 49	69.29 6548
92	Parwan	PRN008	DG&CP	GEP33	GEP22	Afghan Telecom	35.0162 21	69.17 0006
93	Parwan	PRN011	DG&SP	GEP22	0	Wazir Khe, Bayan	35.0319 57	69.20 6112
94	Parwan	PRN012	DG&SP	GEP22	0	Dolana, Laysay Noman	35.0162 7	69.18 7884
95	Parwan	PRN032	DG&CP	GEP22	0	Mayana Gozar	35.1124 13	69.22 9775
96	Parwan	PRN034	DG&ACB	GEP22	0	Dih Qazi	35.0165 38	69.24 2492
97	Parwan	PRN045	DG&SP	GEP22	0	Char Qalay Naizi	34.9830 84	69.28 1348
98	Laghman	LGM005	DG&CP	GEP22	0	Pahlawan BaBa	34.6876 8	70.22 581
99	Laghman	LGM026	DG&CP	GEP22	0	Qalacha	34.6613 6	70.21 26
100	Nangarhar	LGM035	DG&SC	GEP13	0	Markit Area	34.7659 38	70.38 5217
101	Laghman	LGM054	DG&CP	GEP22	0	Charbagh	34.5229 8	70.28 718
102	parwan	PRN053	DG&SP	GEP22	0	Dado Sarai	35.0508 25	69.21 8378
103	Kabul	KBL164	DG&DG	GEP22	GEP22	Lataband	34.5071 8	69.57 379

104	Parwan	PRN006	DG& DG	GEP22	GEP22	Sare Kohi Ofyane Sharif	35.04658889	69.12765
105	Kabul	KBL020	DG& DG	JBL22	JBL22	Hese Awal, Masjide Hzt Ali KhKh	34.575397	69.129349
106	Kabul	KBL368	DG& DG	GEP22	GEP22	Dara-i-Osbin	34.70216	69.81196
107	Kabul	RPT_KB L005	DG& DG	GEP22	GEP22	Kohe Afshar		
108	Parwan	PRN015	DG& CP	GEP22	0	Khaja Seyaran	34.983334	69.164334
109	Kabul	KBL084	DG& CP	GEP22	0	sarke 40m Qalai Zaman Khan	34.53034	69.23411
110	Laghman	LGM013	DG& CP	GEP22	0	Qarghai District	34.54681	70.24622
111	Laghman	LGM025	DG& CP	GEP22	0	Banda E Agha	34.672532	70.215572
112	Laghman	LGM028	DG& CP	GEP22	0	Sulatan Ghazi Plaza	34.66608	70.20988
113	Kabul	KBL015	DG& CP	RID	0	Khushal_Khan_Mena	34.52397	69.10629
114	Balkh	BKH108	DG& ACB	22KVA	N/A	Qala mir, Shahid Mazari Graveyard.	36.72111	67.07927
115	Jawzjan	JZN002	DG& ACB	GEP 22KVa	GEP 13KVa	Murdian, close to district building	36.98856	66.31018
116	Jawzjan	JZN011	DG& SP	GEP 9KVa	GEP 9KVa	Islam Tawarabaf	37.0469	66.23616
117	Jawzjan	JZN050	DG& CP	GEP 22KVa		Bandare Sari pul, Khair khana	36.65894	65.75323
118	Balkh	BKH012	DG& SP	22KVA	13KVA	Taligak	37.02697	66.77473
119	Balkh	BKH056	DG& DG	22KVA	13KVA	Jare khoni	36.66446	66.90399
120	Balkh	BKH100	DG& ACB	22KVA	N/A	shir abad ulya, Golaye Ghulam	36.69738	67.03524
121	Faryab	FRB003	DG& CP	GEP 22KVa		Ghajr abad.	36.92488	65.11946
122	Faryab	FRB006	DG& CP	RID	RID	Postin doz khana	36.95562	65.1238
123	Faryab	FRB010	DG& DG	GEP 22KVa	GEP 22KVa	Close to chawke almar	35.84719	64.53279
124	Faryab	FRB022	DG& CP	GEP 13KVa		Khan Char bagh	36.99686	65.21771
125	Faryab	FRB029	DG& CP	GEP 13KVa		Kokcha qala	36.3687	64.89941
126	Faryab	FRB047	DG& CP	GEP 13KVa		Saqiz khana	36.95648	65.1403
127	Faryab	FRB067	DG& CP	GEP 22KVa		Alhandi Village	36.96317	65.11932
128	Faryab	FRB068	DG& CP	GEP 22KVa		Karta Dustum, Ghond 35	35.91076	64.78239
129	Faryab	FRB072	DG& ACB	GEP 22KVa		Karta Sulh	35.92873	64.77476
130	Faryab	FRB079	DG& CP	GEP 22KVa	GEP 22KVa	Arab Shah, Torakhan	36.98099	65.16568
131	Jawzjan	JZN003	DG& SP	GEP 13KVa	GEP 13KVa	Qarqen, close to district building	37.41389	66.03534

132	Jawzjan	JZN005	DG&SP	GEP 9KV _a	GEP 9KV _a	Qaria Ma Saigha Bala	37.52697	65.71352
133	Jawzjan	JZN010	DG&SP	GEP 13KV _a		Khana Aqa village	36.85796	66.16325
134	Jawzjan	JZN012	DG&SP	GEP 13KV _a		Hydar Abad, Close to Jungle Aregh	36.9366	66.2487
135	Jawzjan	JZN015	DG&ACB	GEP 22KV _a		Kokal Dash	36.81694	66.32927
136	Jawzjan	JZN019	DG&CP	GEP 13KV _a	GEP 13KV _a	Tonki Uzbekia	36.61094	65.79303
137	Jawzjan	JZN051	DG&CP	GEP 22KV _a		Karte dostum	36.66003	65.77473
138	Jawzjan	JZN053	DG&ACB	GEP 22KV _a		Qudrat bus branch	36.90351	66.18626
139	Jawzjan	JZN054	DG&ACB	GEP 22KV _a		Afghan tape village	36.54175	65.79262
140	Saripul	SPL004	DG&SP	GEP 22KV _a	GEP 22KV _a	Tokzar.	35.95578	66.42766
141	Saripul	SPL020	DG&CP	GEP 22KV _a		Shahre now, close to Qomandani	36.23319	65.93234
142	Saripul	SPL025	DG&CP	GEP 22KV _a		Charm Gari street	36.22018	65.93823
143	Faryab	FRB060	DG&DG	GEP 13KV _a	GEP 13KV _a	Islam Qala village, sari tepa	36.22643	64.85313
144	Saripul	SPL012	DG&DG	GEP 9KV _a	GEP 9KV _a	Taghai Khawja village, sare tepa	35.96375	66.37611
145	Faryab	FRB005	DG&DG	GEP 22KV _a	GEP 22KV _a	Lare Maina, Jare Maina, sari tepa	35.77239	63.92152
146	Faryab	FRB077	DG&DG	GEP 22KV _a	GEP 22KV _a	Takht-e-Ishan	36.49541	64.93174
147	Balkh	BKH133	DG&DG	13KVA	13KVA	Chimtal, Asyab gorg.	36.64938	66.6692
148	Saripul	SPL006	DG&DG	GEP 22KV _a	GEP 22KV _a	Aman tepa	36.02767	66.40263
149	Balkh	BKH036	DG&ACB	22KVA	22KVA	Sia jar, tangi cheshma shefa	36.55832	66.99337
150	Balkh	BKH016	DG&SP	13KVA	N/A	Sholgara, Boria Baf, Sari tepa	36.45232	66.92648
151	Badakhsan	BDK001	DG&SP	13KVA		Tapa Gulam Hussain	36.83445	70.09904
152	Badakhsan	BDK003	DG&SP	22KVA	22KVA	Sir Petwan, Mountian	37.10416	70.42721
153	Badakhsan	BDK008	DG&SP	13KVA		Darkhan, Khash Mountain	37.02343	70.76777
154	Badakhsan	BDK009	DG&ACB	22KVA		Bazar Baharak	36.99746	70.89123
155	Badakhsan	BDK012	DG&SP	13KVA		Urgo Bazar Ghariq shah	37.04341	70.42189
156	Badakhsan	BDK013	DG&SP	13KVA		Nimtala Rahe Ab	36.9265	70.42827
157	Badakhsan	BDK014	DG&SP	13KVA		Alocha-kham	36.9631	70.2775
158	Badakhsan	BDK022	DG&DG	13KVA	13KVA	Laie aba, Faizabad	37.14821	70.52853
159	Baghlan	BGL002	DG&CP	22KVA		Bazar Shahr Kona	36.22633	68.77108

160	Baghlan	BGL006	DG&DG	22KVA	NA	Tawa-sha	36.07745	69.12973
161	Baghlan	BGL029	DG&SP	13KVA	NA	Boghawi	35.87882	68.75539
162	Baghlan	BGL037	DG&ACB	22KVA	NA	Bazar Nahirin	36.06478	69.09879
163	Baghlan	BGL045	DG&ACB	22KVA	NA	Sheikh jalal	36.08343	68.903206
164	Kundoz	QDZ003	DG&CP	22KV	22KV	Kucha Afghan-Besim Sare Dawra	36.70749	68.8786
165	Kundoz	QDZ010	DG&CP	22Kv	22KV	Chila Mazar	36.71535	68.89321
166	Kundoz	QDZ021	DG&DG	13KV	13KV	Qaria Haji shaiesta mir	37.0705	69.2179
167	Kundoz	QDZ032	DG&CP	13KV	13KV	Qaria Qarawel Tape	36.73861	68.85013
168	Kundoz	QDZ047	DG&ACB	22KV	NA	Aqtash	36.76337	69.0564
169	Kundoz	QDZ054	DG&CP	22KV	9KV	Pol-e-Alchin	36.81538	68.86079
170	Baghlan	RPT_BG L005	DG&DG	22KVA	22KVA	Qandari Qeshlaq		
171	Saman gan	RPT_SM G006	DG&DG	22KVA	22KVA	Khers Khana		
172	Takhar	TKH001	DG&ACB	22KVA		CHAHAB Bazar	37.39889	69.81276
173	Takhar	TKH002	DG&SP	22KVA		Tepa Said Ha	37.43129	69.61404
174	Takhar	TKH004	DG&SP	22KVA		Tepa Tokham	37.02404	69.40506
175	Takhar	TKH010	DG&SP	13KVA		Tapa AL Malik	36.7964	69.95748
176	Takhar	TKH011	DG&SP	13KVA		Bazar Khwaja Ghar	37.06895	69.42451
177	Takhar	TKH016	DG&SP	13KVA		Qazal Qala	37.204994	69.74516
178	Takhar	TKH019	DG&SP	9KVA		Qolbars	36.73191	69.40276
179	Takhar	TKH024	DG&SP	9KVA		Jarbashi	37.50364	69.67465
180	Takhar	TKH030	DG&CP	22KVA		khatm sarag awal shafakhana, Takhar city	36.73545	69.54966
181	Takhar	TKH032	DG&ACB	22KVA		Sarae Sang	36.77968	69.51702
182	Takhar	TKH038	DG&CP	22KVA		Shafakhana Naw, Takhar city	36.7311	69.52292
183	Helmand	HLM011	DG&CP	GEP22	city power	Karta lagan, near Mohammadi masjeed	31.59138	64.37454
184	Kandahar	QDH065	DG&DG	GEP022	GEP022	Hawoz E Madad, Zhairey District	31.55998	65.33045
185	Orazgan	OZN001	DG&SC	GEP022	DG22	Near Masjid street	32.62753	65.87378
186	Helmand	HLM015	DG&DG	GEP22	GEP09	on the top of shorab Air base mountain	31.99129	64.08028
187	Helmand	HLM065	DG&DG	GEP9	GEP09	Cobar tapa	32.11452	64.84212

189	Hirat	HRT022	DG&CP	GEP13		Char rahi Zaman jan Jade Haqiqi	34.33769	62.21122
190	Hirat	HRT043	DG&CP	RID 20kva		Now Badam	34.29724	62.31525
191	Hirat	HRT047	DG&ACB	GEP22		Markaz Guzara	34.24753	62.22464
192	Hirat	HRT086	DG&CP	GEP22		Mostofiat koche Baland oab	34.35084	62.22199
193	Hirat	HRT115	DG&CP	GEP13		Ganj Sabiqa	34.3336	62.16814
194	Hirat	HRT128	DG&CP	GEP9kva		Sarak Aasia Kolokhi	34.32248	62.19236
195	Hirat	HRT133	DG&ACB	GEP22		Mahale-e- Shahid Kazimi	34.38107	62.1461
196	Hirat	HRT008	DG&CP	GEP22		Baghche Mostofi	34.35418	62.1791
197	Hirat	HRT009	DG&CP	GEP22		Jade Mahtab	34.36054	62.19972
198	Hirat	HRT016	DG&CP	GEP22		Jebrail Mahal Etifaq	34.37617	62.13944
199	Hirat	HRT018	DG&CP	GEP22		Zeyart ja Mahal karwa	34.20401	62.14008
200	Hirat	HRT023	DG&CP	GEP13		Badil Monar Ha Jade Molemen	34.36389	62.1883
201	Hirat	HRT030	DG&ACB	GEP22		Aziz Abad Qala Mirza	33.3872	62.30009
202	Hirat	HRT049	DG&ACB	GEP22		Buka	34.258222	62.466372
203	Hirat	HRT055	DG&CP	GEP9kva		Jade Cemetra Moqabel Jade bagh morad	34.35346	62.20665
204	Hirat	HRT056	DG&CP	GEP22		Jade Arbab Zada	34.344686	62.21042
205	Hirat	HRT071	DG&CP	GEP9kva		Panj Rah Bekrabad	34.33221	62.20143
206	Hirat	HRT075	DG&ACB	GEP22		Follad Abad	34.35313	62.00566
207	Hirat	HRT093	DG&CP	GEP9kva		Jebrail Ketab Khana	34.38287	62.13853
208	Hirat	HRT109	DG&ACB	GEP22		Shaidaye- Shahrak Kahdistani	34.36313	62.30515
209	Hirat	HRT123	DG&ACB	GEP22		Towhid 10	34.372663	62.146021
210	Hirat	HRT129	DG&CP	GEP9kva		Payan Aab	34.33348	62.17954

4.2 Sites List with Fuel Tanks Capacity and DG Screen Type:

S.No.	SiteCode	power sources..	DG1. Capacity	DG1 screen type	DG2 screen type	Fuel Tank1 capacity	Fuel Tank2 capacity
1	NGR021	DG&CP	GEP13	Power Wizard 2.0	N/A	3000	0
2	NGR100	DG&CP	CAT22	CAT-EMCP 4.1	N/A	3000	0

3	NGR123	DG&CP	GEP9	Power Wizard 2.1	N/A	5000	0
4	NGR003	DG&CP	GEP22	CAT-EMCP 4.1	N/A	3000	0
5	NGR025	DG&CP	GEP22	Power Wizard 2.0	N/A	3000	0
6	NGR027	DG&CP	GEP22	DCP-10	N/A	3000	0
7	NGR105	DG&CP	GEP22	Deep Sea Electronics (DSE)	N/A	5000	0
8	NGR114	DG&CP	CAT22	Deep Sea Electronics (DSE)	N/A	4000	0
9	NGR017	DG&CP	GEP22	Power Wizard 2.0	N/A	3000	0
10	NGR109	DG&CP	GEP22	DCP-10	N/A	3000	0
11	KBL200	DG&CP	GEP22	Power Wizard 1.1	N/A	1870	0
12	KBL393	DG&CP	CAT22	CAT-EMCP 4.1	N/A	3000	0
13	KBL304	DG&CP	GEP13	Power Wizard 1.1	0	3000	0
14	PRN027	DG&SC	GEP22	Power Wizard 1.1	Power Wizard 1.1	3000	3000
15	NGR016	DG&CP	GEP22	Power Wizard 1.1	0	3000	0
16	NGR053	DG&SC	GEP13	Power Wizard 1.0	Power Wizard 1.0	3000	0
17	NGR008	DG&SC	GEP22	Power Wizard 1.1	0	5000	0
18	KBL067	DG&ACB	GEP22	Power Wizard 1.1	0	5000	0
19	KBL098	DG&CP	GEP22	DCP-10	DCP-10	5000	0
20	KBL136	DG&CP	GEP22	DCP-10	Power Wizard 2.0	3000	0
21	KBL168	DG&CP	GEP22	Power Wizard 1.1	Power Wizard 1.1	3000	0
22	LGR016	DG&SC	GEP22	Power Wizard 1.1	Damaged	3000	
23	LGR019	DG&SC	GEP22	Power Wizard 1.1	Power Wizard 1.1	3000	
24	PRN019	DG&ACB	GEP22	DCP-10	0	3000	3000
25	NGR004	DG&SC	GEP22	DCP-10	DCP-10	3000	0
26	NGR006	DG&DG	GEP22	DCP-10	Power Wizard 1.1	3000	0
27	NGR018	DG&CP	GEP22	Power Wizard 1.1	DCP-10	3000	0
28	NGR028	DG&DG	GEP22	DCP-10	DCP-10	5000	0
29	NGR032	DG&SC	GEP22	Power Wizard 1.1	Power Wizard 1.1	3000	0
30	NGR046	DG&SP	GEP13	Power Wizard 2.0	0	3000	0
31	NGR049	DG&SC	GEP13	Power Wizard 2.0	Power Wizard 2.0	3000	0
32	NGR057	DG&CP	GEP22	DCP-10	0	3000	0
33	NGR107	DG&SC	GEP22	Deep Sea Electronics (DSE)	Power Wizard 1.0	2000	0
34	KNR003	DG&SC	GEP22	DCP-10	0	3000	0
35	KNR004	DG&SC	GEP22	DCP-10	DCP-10	5000	0
36	KNR013	DG&DG	GEP13	Power Wizard 2.0	DCP-10	3000	0
37	LGR006	DG&SC	GEP9	Power Wizard 1.1	Power Wizard 1.1	3000	
38	BMYO17	DG&DG	GEP22	Power Wizard 1.1	Power Wizard 1.1	3000	8000
39	NGR034	DG&DG	GEP22	Power Wizard 1.0	Power Wizard 1.0	5000	0
40	LGR012	DG&DG	GEP9	Power Wizard 1.0	Power Wizard 1.0	3000	
41	KNR005	DG&DG	GEP13	Power Wizard 1.0	Power Wizard 1.0	5000	0
42	KBL333	DG&SC	GEP22	DCP-10	0	3000	0
43	NGR041	DG&SC	GEP22	DCP-10	Power Wizard 1.1	3000	0
44	NGR061	DG&CP	GEP13	Power Wizard 1.0	N/A	3000	0
45	KBL191	DG&CP	GEP22	Power Wizard 1.1	N/A	1000	0
46	KBL264	DG&SP	GEP22	DCP-10	N/A	3000	0
48	KBL049	DG&CP	RID20	RID	N/A	1000	0
49	GZN032	DG&SC	GEP22	Power Wizard 1.1	N/A	3000	0

50	PKT006	DG&SC	GEP22	DCP-10	N/A	3000	0
51	PKT009	DG&CP	GEP22	Power Wizard 1.1	N/A	3000	0
52	KWT016	DG&SC	GEP22	DCP-10	N/A	3000	0
53	PKT001	DG&SC	GEP22	Power Wizard 1.1	N/A	5000	0
54	WDK001	DG&CP	GEP22	DCP-10	N/A	5000	0
55	KWT004	DG&DG	GEP22	Power Wizard 1.1	Power Wizard 1.1	5000	0
56	KWT010	DG&DG	GEP22	Power Wizard 1.1	Power Wizard 1.1	3000	0
57	KWT012	DG&DG	GEP22	DCP-10	DCP-10	3000	0
58	KWT015	DG&DG	GEP22	DCP-10	DCP-10	3000	0
59	KBL293	DG&CP	GEP22	DCP-10	N/A	3000	0
60	KBL017	DG&CP	RID20	RID	N/A	1000	0
61	KBL039	DG&CP	GEP22	Power Wizard 1.1	N/A	3000	0
62	KBL228	DG&CP	GEP22	Power Wizard 1.1	N/A	1870	0
63	KBL354	DG&CP	GEP13	Power Wizard 1.0	N/A	500	0
64	KBL150	DG&CP	GEP9	RID	N/A	1000	0
65	KBL249	DG&CP	RID20	RID	N/A	1000	0
66	KBL053	DG&CP	RID20	RID	N/A	1000	0
67	KBL412	DG&SC	GEP13	Power Wizard 2.0	N/A	3000	0
68	KBL129	DG&CP	GEP22	DCP-10	N/A	3000	0
69	KBL134	DG&CP	GEP9	Power Wizard 1.1	N/A	3000	0
70	KBL266	DG&ACB	GEP22	DCP-10	N/A	3000	0
71	KBL290	DG&SC	GEP22	DCP-10	N/A	3000	0
72	KBL314	DG&CP	RID20	RID	N/A	1000	0
73	KBL109	DG&SC	GEP13	Power Wizard 1.0	N/A	2000	0
74	KBL258	DG&CP	GEP9	Power Wizard 1.0	N/A	3000	0
75	KBL223	DG&CP	GEP22	DCP-10	N/A	3000	0
76	KBL089	DG&CP	GEP9	Power Wizard 1.0	N/A	3000	0
77	KBL105	DG&CP	GEP22	Power Wizard 2.0	N/A	3000	0
78	KBL106	DG&CP	GEP22	DCP-10	N/A	3000	0
79	KBL170	DG&CP	GEP22	DCP-10	N/A	3000	0
80	KBL174	DG&CP	GEP22	DCP-10	N/A	2000	0
81	KBL329	DG&CP	GEP22	DCP-10	N/A	3000	0
82	KBL378	DG&ACB	GEP22	Power Wizard 1.1	N/A	2000	0
83	KBL380	DG&CP	GEP22	DCP-10	N/A	3000	0
84	KBL141	DG&CP	GEP13	Power Wizard 2.0	N/A	3000	0
85	KPS005	DG&SP	GEP13	Power Wizard 2.0	N/A	3000	0
86	LGM011	DG&SC	GEP22	DCP-10	N/A	3000	0
87	KBL035	DG&CP	GEP22	Lovato	N/A	3000	0
88	KBL135	DG&SC	GEP22	Power Wizard 2.0	N/A	3000	0
89	KBL140	DG&CP	GEP33	Power Wizard 1.1	DCP-10	3000	0
90	KPS012	DG&SP	GEP22	Power Wizard 1.1	N/A	1870	0
91	PJR005	DG&ACB	GEP22	Power Wizard 2.0	N/A	3000	6000
92	PRN008	DG&CP	GEP33	Deep Sea Electronics (DSE)	DCP-10	5000	0
93	PRN011	DG&SP	GEP22	DCP-10	N/A	3000	0
94	PRN012	DG&SP	GEP22	Power Wizard 1.0	N/A	3000	0
95	PRN032	DG&CP	GEP22	DCP-10	N/A	5000	0

96	PRN034	DG&ACB	GEP22	Power Wizard 1.1	N/A	3000	0
97	PRN045	DG&SP	GEP22	DCP-10	N/A	3000	0
98	LGM005	DG&CP	GEP22	Power Wizard 2.0	N/A	3000	0
99	LGM026	DG&CP	GEP22	DCP-10	N/A	3000	0
100	LGM035	DG&SC	GEP13	Power Wizard 2.0	N/A	3000	0
101	LGM054	DG&CP	GEP22	DCP-10	N/A	3000	0
102	PRN053	DG&SP	GEP22	Power Wizard 1.0	N/A	3000	0
103	KBL164	DG&DG	GEP22	DCP-10	Power Wizard 1.1	3000	5000
104	PRN006	DG&DG	GEP22	Power wizard 1.2	Power wizard 1.2	3000	8000
105	KBL020	DG&DG	JBL22	Power Wizard 1.0	Power wizard 1.0	3000	0
106	KBL368	DG&DG	GEP22	DCP-10	DCP-10	3000	0
107	RPT_KBL005	DG&DG	GEP22	Lovato	Lovato	3000	6000
108	PRN015	DG&CP	GEP22	Power Wizard 1.1	N/A	3000	0
109	KBL084	DG&CP	GEP22	Power Wizard 1.1	N/A	5000	0
110	LGM013	DG&CP	GEP22	DCP-10	N/A	3000	0
111	LGM025	DG&CP	GEP22	DCP-10	N/A	3000	0
112	LGM028	DG&CP	GEP22	DCP-10	N/A	3000	0
113	KBL015	DG&CP	RID	RID	N/A	3000	0
114	BKH108	DG&ACB	22KVA	DCP-10	N/A	3000	0
115	JZN002	DG&ACB	GEP 22KVa	DCP-10	Power Wizard 2.0	3000	0
116	JZN011	DG&SP	GEP 9KVa	Power Wizard 1.0	Power Wizard 1.0	3000	0
117	JZN050	DG&CP	GEP 22KVa	DCP-10		3000	0
118	BKH012	DG&SP	22KVA	DCP-10	Power Wizard 2.0	1000	0
119	BKH056	DG&DG	22KVA	DCP-10	Power Wizard 2.0	3000	0
120	BKH100	DG&ACB	22KVA	CAT-EMCP 4.1	N/A	3000	0
121	FRB003	DG&CP	GEP 22KVa	DCP-10		3000	0
122	FRB006	DG&CP	RID	RID	RID	1000	0
123	FRB010	DG&DG	GEP 22KVa	DCP-10	DCP-10	3000	0
124	FRB022	DG&CP	GEP 13KVa	Power Wizard 2.0		3000	0
125	FRB029	DG&CP	GEP 13KVa	Power Wizard 2.0		3000	0
126	FRB047	DG&CP	GEP 13KVa	DCP-10		3000	0
127	FRB067	DG&CP	GEP 22KVa	Deep Sea Electronics (DSE)		5000	0
128	FRB068	DG&CP	GEP 22KVa	Deep Sea Electronics (DSE)		3000	0
129	FRB072	DG&ACB	GEP 22KVa	Deep Sea Electronics (DSE)		3000	0
130	FRB079	DG&CP	GEP 22KVa	DCP-10	DCP-10	3000	0
131	JZN003	DG&SP	GEP 13KVa	Power Wizard 2.0	Power Wizard 2.0	3000	0
132	JZN005	DG&SP	GEP 9KVa	Power Wizard 1.0	Power Wizard 1.0	5000	0

133	JZN010	DG&SP	GEP 13KV _a	Power Wizard 2.0		3000	0
134	JZN012	DG&SP	GEP 13KV _a	Power Wizard 2.0		3000	0
135	JZN015	DG&ACB	GEP 22KV _a	DCP-10		5000	0
136	JZN019	DG&CP	GEP 13KV _a	Power Wizard 2.0	Power Wizard 2.0	3000	0
137	JZN051	DG&CP	GEP 22KV _a	Power Wizard 1.1		5000	0
138	JZN053	DG&ACB	GEP 22KV _a	Power Wizard 1.1		3000	0
139	JZN054	DG&ACB	GEP 22KV _a	Deep Sea Electronics (DSE)		3000	0
140	SPL004	DG&SP	GEP 22KV _a	DCP-10	DCP-10	3000	0
141	SPL020	DG&CP	GEP 22KV _a	DCP-10		3000	0
142	SPL025	DG&CP	GEP 22KV _a	Power Wizard 1.1		3000	5000
143	FRB060	DG&DG	GEP 13KV _a	Power Wizard 2.0	Power Wizard 1.0	3000	0
144	SPL012	DG&DG	GEP 9KV _a	Power Wizard 1.0	Power Wizard 1.0	3000	0
145	FRB005	DG&DG	GEP 22KV _a	DCP-10	Power Wizard 1.0	3000	3000
146	FRB077	DG&DG	GEP 22KV _a	Power Wizard 1.0	Power Wizard 1.0	3000	0
147	BKH133	DG&DG	13KVA	Power Wizard 2.0	Power Wizard 2.0	3000	0
148	SPL006	DG&DG	GEP 22KV _a	Power Wizard 1.1	EMCP 4.1	5000	0
149	BKH036	DG&ACB	22KVA	DCP-10	N/A	5000	0
150	BKH016	DG&SP	13KVA	Power Wizard 2.0	N/A	3000	0
151	BDK001	DG&SP	13KVA	Power Wizard 1.0		5000	5000
152	BDK003	DG&SP	22KVA	DCP-10	DCP-10	3000	5000
153	BDK008	DG&SP	13KVA	Power Wizard 2.0		3000	5000
154	BDK009	DG&ACB	22KVA	Lovato		3000	0
155	BDK012	DG&SP	13KVA	Power Wizard 2.0		3000	0
156	BDK013	DG&SP	13KVA	Power Wizard 2.0		3000	0
157	BDK014	DG&SP	13KVA	Power Wizard 2.0		3000	0
158	BDK022	DG&DG	13KVA	Power Wizard 2.0		3000	0
159	BGL002	DG&CP	22KVA	DCP-10		3000	0
160	BGL006	DG&DG	22 KVA	DCP-10	Power Wizard 1.1	5000	0
161	BGL029	DG&SP	13 KVA	Power Wizard 1.0	NA	5000	5000
162	BGL037	DG&ACB	22 KVA	DCP-10	NA	3000	0
163	BGL045	DG&ACB	22 KVA	Power Wizard 1.1	NA	5000	0
164	QDZ003	DG&CP	22KV	DCP-10	DCP-10	3000	0
165	QDZ010	DG&CP	22Kv	DCP-10	NA	3000	0
166	QDZ021	DG&DG	13KV	Power Wizard 2.0	Power Wizard 2.0	3000	0
167	QDZ032	DG&CP	13KV	Power Wizard 2.0	Power Wizard 2.0	3000	0
168	QDZ047	DG&ACB	22KV	Lovato	NA	3000	0

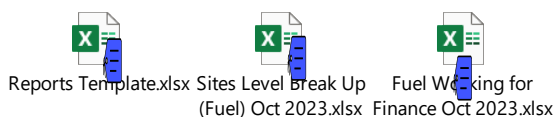
169	QDZ054	DG&CP	22KV	DCP-10	Powerwizard-1.0	3000	0
170	RPT_BGL005	DG&DG	22KVA	Power Wizard 1.0	DCP-10	5000	0
171	RPT_SMG006	DG&DG	22KVA	DCP-10	DCP-10	3000	5000
172	TKH001	DG&ACB	22KVA	Power Wizard 1.1		3000	0
173	TKH002	DG&SP	22KVA	DCP-10		3000	0
174	TKH004	DG&SP	22KVA	DCP-10		3000	0
175	TKH010	DG&SP	13KVA	Power Wizard 2.0		5000	5000
176	TKH011	DG&SP	13KVA	Power Wizard 2.0		3000	0
177	TKH016	DG&SP	13KVA	Power Wizard 2.0		5000	0
178	TKH019	DG&SP	9KVA	Power Wizard 1.0		3000	0
179	TKH024	DG&SP	9KVA	Power Wizard 1.0		3000	0
180	TKH030	DG&CP	22KVA	DCP-10		3000	0
181	TKH032	DG&ACB	22KVA	DCP-10		3000	0
182	TKH038	DG&CP	22KVA	Power Wizard 1.0		3000	0
183	HLM011	DG&CP	GEP22	Power Wizard 1.1		5000	0
184	QDH065	DG&DG	GEP022	Power Wizard 1.1	Power Wizard 1.1	3000	0
185	OZN001	DG&SC	GEP022	Power Wizard 1.1	Power Wizard 1.1	3000	0
186	HLM015	DG&DG	GEP22	Power Wizard 1.1	Power Wizard 1.0	5000	0
187	HLM065	DG&DG	GEP9	Power Wizard 1.1	Power Wizard 1.1	3000	0
189	HRT022	DG&CP	GEP13	Power Wizard 2.0		3000	0
190	HRT043	DG&CP	RID 20kva	RID		1000	0
191	HRT047	DG&ACB	GEP22	Power Wizard 1.1		5000	5000
192	HRT086	DG&CP	GEP22	Power Wizard 1.1		3000	0
193	HRT115	DG&CP	GEP13	Power Wizard 2.0		3000	0
194	HRT128	DG&CP	GEP9kva	Power Wizard 1.0		3000	0
195	HRT133	DG&ACB	GEP22	Power Wizard 1.1		5000	0
196	HRT008	DG&CP	GEP22	DCP-10		3000	0
197	HRT009	DG&CP	GEP22	DCP-10		3000	0
198	HRT016	DG&CP	GEP22	DCP-10		5000	0
199	HRT018	DG&CP	GEP22	DCP-10		5000	0
200	HRT023	DG&CP	GEP13	Power Wizard 2.0		3000	0
201	HRT030	DG&ACB	GEP22	Power Wizard 1.1		5000	0
202	HRT049	DG&ACB	GEP22	Power Wizard 1.1		5000	0
203	HRT055	DG&CP	GEP9kva	Power Wizard 1.0		3000	0
204	HRT056	DG&CP	GEP22	Power Wizard 1.1		3000	0
205	HRT071	DG&CP	GEP9kva	Power Wizard 1.0		3000	0
206	HRT075	DG&ACB	GEP22	Power Wizard 1.1		5000	5000
207	HRT093	DG&CP	GEP9kva	Power Wizard 1.0		3000	0
208	HRT109	DG&ACB	GEP22	Power Wizard 1.1		5000	0
209	HRT123	DG&ACB	GEP22	Power Wizard 1.1		3000	0
210	HRT129	DG&CP	GEP9kva	Power Wizard 1.0		3000	0

5 Reporting Tables:

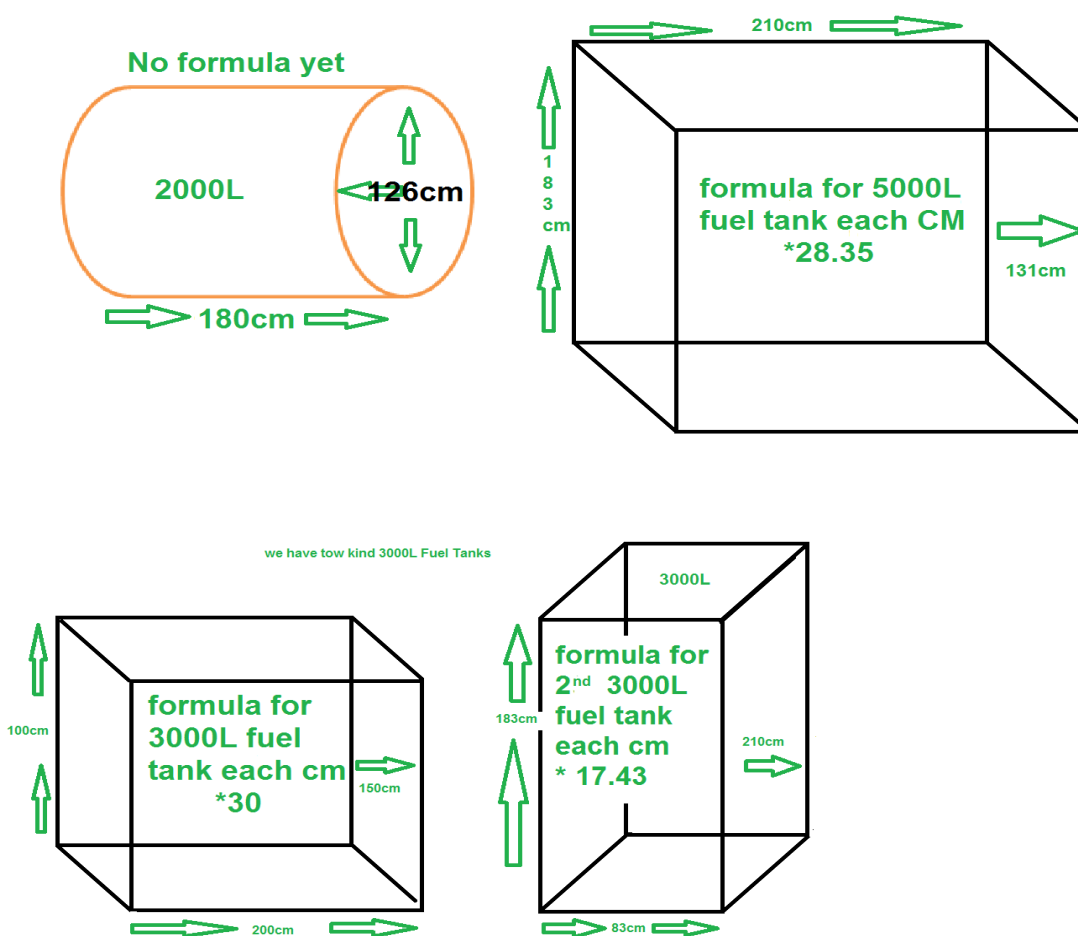
5.1 Fuel Planning Reporting Format:

#	Site ID	Power Source	Date	R-I (A)	Y-I (A)	B-I (A)	Total KW	kWH	Liter	mm	Fuel Consumption (L/H)	Fuel Consumption Monthly	Alarm	Cumulative DG RH	Daily DG RH	Monthly DG RH
1	KBL001	DG+CP	16-09-2023	6	6	5	3.8	15298.7	997	579	2.5		Low Fuel	2301:42:42	13	390

5.2 Budgeting Reporting Formats:



5.3 TYPICAL FUEL TANK IN EA SITES:



6 Tender terms:

1.RFP Deadline is **14th January 2024** Afghanistan time. The bids shall be submitted through email (mhsalimee@etisalat.af) and marked clearly with the **RFP name, and number**.

2. Bid received after the above deadline shall not be accepted.

3. Local and international firms can send their offer via email to mhsalimee@etisalat.af and copy lhsanullah@etisalat.af.

4. Etisalat Afghanistan reserves the right to accept or reject any or all bids and to annul the bidding process at any time, without thereby incurring any liability to the affected bidder(s) or any obligations to inform the affected bidder(s) of the grounds for Etisalat Afghanistan action.

5. **The bidder** shall submit a proposal with separate (Technical and Commercial) parts. The commercial part must be password password-protected document and we will request the password once the concerned committee opens bids (start bid's Commercial evaluation). The bids shall be first evaluated technically. Technical evaluation will be based on the conformity to required technical specifications and compliance matrix specified in the Bidding Documents. Only technically compliant bids which meet all the mandatory service effecting requirements will be evaluated commercially.

6. Bidder should be registered with Etisalat Afghanistan in Vendor Registration List. If any interested bidder **is not registered**, first they should fill the attached Vendor Registration Form and provide following documents before tender deadline and submission of bid. Bidder's offer will not be considered without the registration process.

1- Company Profile

2- Business License

3- President and Vice President ID Cards/Tazkira Copies

4- Article of Association (نامه اساس)

3. Past Performance:

Firm must describe past performance on similar public and or private agency contracts, including past performance on similar works for any other telecom company.

7. All correspondence on the subject may address to Hamid Salimee, Coordinator Procurement, and Etisalat Afghanistan. Email mhsalimee@etisalat.af and Phone No. +93781 201167.

7 Other Terms and Conditions

7.1 Disclaimer

ETA has compiled this tender in good faith; however its accuracy cannot be guaranteed. ETA shall not accept liability for errors or omissions. No guarantee can be given, nor should any be implied from the data, projections, targets or estimates stated in this document.

Amendments to the information contained in this tender document shall be provided at the sole discretion of ETA, which reserves the right to withhold information without stating a reason.

The work performed by the Vendors in evaluating and responding to the tender shall be at the Vendors' own expense.

7.2 Confidentiality

The contents of this tender inclusive of all supporting documents are governed by the terms and conditions of the non-disclosure agreement ("NDA") between the Bidder and ETA. None of the information contained in this tender, or any of its supporting documents, shall be fully or partially disclosed to third parties without the prior written approval of ETA.

In the case where there is no NDA signed between ETA and the Bidder, the Bidder's participation in this tender shall be considered as an implicit agreement of the NDA on the Bidder's party. Any breach of the confidentiality and NDA shall result in immediate exclusion from the tender process.

ETA reserves the right to pursue any legal action to protect its right as per the NDA. The information contained in the tender shall be used exclusively for the development of the proposal and shall not, under any circumstances, be used for any other purpose.

In the event that the Bidder becomes aware of other entities, which have illicit access to the contents of this document, the Bidder shall notify ETA's SPOC immediately as well as take every action required to minimize the effects of the information leak and prevent it from recurring.

The Bidder shall destroy all records of this tender at the end of the process.

The Bidder shall mark "CONFIDENTIAL" all information supplied as part of the tender response which it desires ETA to treat confidentially.

7.3 Personnel

7.3.1 Competence of personnel

The Vendor shall only use personnel with necessary and sufficient formal qualifications as well as experience to execute the works.

7.3.2 Approval of key personnel

The Vendor shall provide ETA a list of the key personnel who will be responsible for the execution of the project and an organization structure for the lifecycle of the project. Key personnel include but not limited; Executive Management, Program Lead, Program Manager(s), Project Manager(s), Project Planner(s), Engineering Director(s). The Vendor shall provide as part of its response a list of all key personnel. In addition, the Vendor shall provide educational and experience profile documents for each person listed. ETA shall approve each individual proposed by the Vendor.

7.3.3 Changes to key personnel

In the event that ETA identifies personnel that are not qualified, the MSP shall, at its own costs, immediately replace the said persons.

The MSP shall only replace personnel due to illness or other unpredictable events. The MSP shall notify ETA immediately and provide reasons and where applicable proof of the circumstances related to the change. The MSP shall propose replacement personnel to be approved by ETA.

The MSP shall be held responsible for all costs incurred as a result of the replacement, including necessary transfer of knowledge.

7.4 Interoperability with existing equipment

The MSP shall ensure that all equipment and systems supplied shall not impact or be impacted by existing equipment or systems. The MSP shall ensure that all works related to the successful integration of equipment and systems are included in the scope of the proposal. All costs related to the integration of equipment and systems either related to the new or existing equipment shall be borne by the Vendor.

7.5 Contractual agreement

By responding to this tender, the Vendor agrees that if selected and awarded a contract, the Vendor shall enter into negotiations in good faith regarding an amendment to any existing agreement between ETA and the Vendor or reach a new agreement for the products and services being investigated hereunder. The tender itself inclusive of all annexes shall form part of the contract.

7.6 Commercial conditions

Given the contractual responsibility of goods producers, Vendors shall bear the responsibility of infrastructural failure. Any additional costs to be added for the correct compliance with the implementation of the provided solution in line with the vendor compliance to this tender will be a sole Vendor responsibility from scope and cost perspective.

Vouchers and Special discounts shall not be considered into the commercial evaluation and might result into losing scores due to non-compliance of commercial requirements from the Vendors' side.

The Vendor commits and declares that its products will work perfectly, also in terms of integrity, in ETA's operations' HW & SW environment and that, in every case, the same Vendor won't ask additional payments, nor will be considered excluded from the commitments of this Contract or POs, pleading misinterpretation, lack, or inadequacy of information relating to ETA operations' HW & SW environment.

7.7 Sub-MSPs

ETA shall certify each sub-MSP, which the Vendor intends to use. Detailed process for certification shall be defined during the negotiation process. ETA reserves the right to reject the use of a proposed sub-MSP upon the completion of the certification process. The Vendor shall provide a full list of all proposed sub-MSPs as part of its technical proposal.

7.8 Interpretation

In this section, in relation to the transfer or assumption of responsibility for Services, references to ETA shall include a reference to a Replacement Vendor.

7.9 Cost of response preparation

ETA shall not be responsible for any costs (expenses or investments) associated with the preparation or any presentations or any other costs incurred by the Vendor as direct or indirect result of this tender. In case any such delivery or other costs for ETA arise, ETA on its discretion may decide not to accept the response or disqualify the Vendor from the tender process.

7.10 Response ownership

Regardless of the ultimate outcome, all responses submitted become the property of ETA, and ETA reserves the right to accept or reject any or all responses without explanation to any Vendor. ETA reserves the right to distribute any response to third parties who are bound to ETA under contract(s), which include non-disclosure provisions, or NDA.

7.11 Response errors

Vendors are solely responsible for any errors or omissions contained in their responses. If the Vendor identifies a misstatement, the Vendor may at its effort and expense submit a replacement response

provided the replacement response fully complies with the tender and provided the replacement response is delivered within the Closing Date and Time. Vendors shall not be allowed to alter responses after the Closing Date and Time. However, if a Vendor identifies a material misstatement after the deadline for submission, the Vendor must notify ETA in writing. In the event the response contains an error in cost, time or other calculations, quoted items shall prevail. In case of inconsistencies between various sections in the response, ETA retains the right to select the option most appropriate at its own discretion.

7.12 Payment terms

- 90% after delivery and 10% after warranty period

7.13 Prices and Currency

Currency for pricing should be DDP-AFN but for overseas bidder could be by CIP/USD:

Bid/offer currency in the TCO model must be in USD and AFN and impact of changes in other foreign currencies against USD shall not have any consequence on USD value.

The conversion rate for the duration of the contract shall be defined during the contract negotiation. All amounts payable are gross amounts but exclusive of any value added tax, use tax, sales tax or similar tax.

All payments shall be made by ETA subject to applicable withholding tax deductions, (if any). All such withholding taxes (including taxes in and outside Afghanistan) shall be to the account of the Vendor. Further, evidence should be furnished of such taxes paid to enable the other party to obtain any credits available to it.

The overall prices to be quoted must be inclusive of all costs needed to complete the project and all aspects to achieve the targeted project scope and KPI's/SLAs.

7.14 Compliance terms:

Vendors are requested to complete a compliance statement document. The Vendor shall list each paragraph in Chapters Three through Seven of this document. The Vendor shall state compliance for each paragraph. Where non-compliant, the Vendor shall state reasons for non-compliance and propose amendments. Any change to the proposed terms shall be considered non-complaint.

8 Definitions

In this document, the following terms and meanings shall be interpreted as indicated:

“Acceptance Test(s)” The test(s) specified in the technical specifications to be carried out to ascertain whether the equipment, facilities, or services, whether in full or a specified part thereof is able to attain the performance level specified in accordance with the provisions of the contract.

“Approved” or **“Approval”** means approved in writing.

“BOQ” stands for Bill of Quantities of each job/work as mentioned in this tender and its annexes according to which the MSP shall supply equipment and/or services.

“Bidding” means a formal procurement procedure under which sealed bids are invited, received, opened, examined, and evaluated for the purpose of awarding a contract.

“Bid/Tender Document” means the Bid/Tender documents issued by EA for invitation of Bids/Offers along with subsequent amendments and clarifications.

“CIP.” means “Carriage & Insurance Paid” as specified in INCOTERM 2000.

“Competent Authority” means the functionary authorized by EA to deal finally with the matter in issue.

“**Completion Date**” means the date by which the MSP is required to complete the Contract.

“Country of Origin” means the countries and territories eligible under the rules elaborated in the “Instructions to Bidders”.

“**Contract**” means the Contract between Etisalat Afghanistan (EA) and the MSP and comprising documents enumerated therein, such as the Conditions of Contract, the Scope of Works,

“**MSP**” means the individual or firm(s) ultimately responsible for supplying all the Equipment/Systems/Material/Items on time and to cost under this contract to EA.

“**MSP’s Representative**” means the person nominated by the MSP and named as such in the contract and approved by EA in the manner provided in the contract.

“**Contract Documents**” means the documents listed in Article (Contract Documents) of the Form of Contract (including any amendments thereto) or in any other article in this contract.

“**Contract Price**” means the price payable to the MSP under the Contract for the full and proper performance of its contractual obligations.

“Day” means calendar day of the Gregorian calendar.

“**Delivery charges**” means local transportation, handling, insurance, and other charges incidental to the delivery of goods to their final destination.

“**DDP**” means Delivered Duty Paid as defined in the Incoterm 2010 including the unloading responsibility of **Bidder**/seller.

For the purpose of clarification, DDP Price here means that all costs, expenses, duties and taxes, incurred or payable on goods by the MSP up to the point the goods are handed over to consignee/ultimate consignee, are included in the price of the goods.

“**Documentation**” means documentation specified in the relevant Article(s).

“Equipment” shall mean the Physical Items/Hardware to be provided by the MSP under the Contract.

“Effective Date” means the date the Contract shall take effect as mentioned in the Contract.

“**Etisalat Afghanistan (ETA)**” means the company registered under the Laws of Islamic Republic of Afghanistan and having office at Ihsan Plaza Charahi Shaheed in person or any person duly authorised by it for the specific purpose for the specific task within the Contract and notified to MSP in writing.

“**FAC**” means Final Acceptance Certificate, which will be issued by designated EA staff after 12 months of issuance of PAC.

“Force Majeure” means Acts of God, Government restrictions, financial hardships, war and hostilities, invasion, act of foreign enemies, rebellion, revolution, riot, industrial disputes, commotion, natural disasters and other similar risks that are outside of MSP's and EA's control.

“Goods” means raw materials, products, equipment, systems, spares, and commodities in solid, liquid or gaseous form.

“Goods Receipt Note (GRN)” means certificate issued by the consignee certifying receipt of Goods in good order and condition.

“Liquidated Damages” mean the monetary damages imposed upon the MSP and the money payable to EA by the MSP on account of late delivery of the whole or part of the goods.

“LoA” means a Letter of Award issued by EA to successful Bidder with regard to the award of Tender.

“LoI” means a Letter of Intent issued by EA to successful Bidder with regard to award of Tender.

“Month” means calendar month of the Gregorian calendar.

“Offer” means the quotation/bid and all subsequent clarifications submitted by the Bidder and accepted by EA in response to and in relation with the Bid Documents.

“Origin” means the place where the Goods are mined, grown or produced.

“Provisional Acceptance Certificate (PAC)”, means certificate which will be issued by EA designated staff to the MSP after receipt of the delivered Goods in good order as per the contract.

“Performance Bond/Security” means an unconditional irrevocable guarantee issued by a bank located in Afghanistan and acceptable to EA commensurate with the value of the contract. The value of the Performance bond/Security shall be as specified in the contract but in no case shall be less than 10% (Ten Percent) of the total contract value.

“Pre-Shipment Inspection” means inspection and testing of Goods at manufacturer's premises in accordance with the provisions of the specifications and the clause(s) of the contract pertaining to Pre-shipment Inspection.

“Prime MSP” means the individual or firm ultimately responsible for supplying all the Goods on time and to cost under this Contract to EA.

“EA's Representative” shall mean the representative to be appointed by EA to act for and on behalf of EA with respect to this Contract.

“Services” means any scope of contract which relates to supply, warranty, and other services and obligations of the Supplier/MSP as provided in the Contract.

“Shipping Documents” means MSP's Valued Invoice, Packing List, Freight Memo (if any), Weight and Measurement Certificate, Original Bill of Lading or Airway Bill (as the case may be), Certificate of

Origin, Warranty Certificate, Insurance Declaration and Inspection Certificate and/or MSP's Factory Test Certificate, as required by the Contract.

“Specifications” means the specifications, provided in the Contract and its annexure and in EA Tender Specifications.

“Software” means the set of instructions to be provided by the MSP necessary for the control, operation and performance of the system in accordance with the requirements of the requirements of the Specifications. These instructions shall include full documentation (flow charts, listings and explanatory notes) including any proprietary Software supplied by the MSP under the provisions of the Contract.

“Supplier/Vendor” (used interchangeably) means the individual or firm ultimately responsible for supplying all the Goods and Services on time and to cost under this Contract acting individually alone or as a “prime MSP” for a consortium.

“Supplier's Representative” means the person nominated by the MSP and named as such in the Contract and approved by EA in the manner provided in the Contract.

“Warranty Period” shall mean the period (s) of twelve (12) months or any extended period starting from the acceptance of the delivered Goods in good order and conditions at consignee's store or site and/or commissioning of the system certified by EA authorized representative (s).