12	Cluster- 3 2 HP AC - Surface Pump with normal controller	1	Nos		
13	Cluster- 3 3 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
14	Cluster- 3 3 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
15	Cluster- 3 3 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
16	Cluster- 3 3 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
17	Cluster- 3 3 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
18	Cluster- 3 3 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
19	Cluster- 3 3 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
20	Cluster- 3 3 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
21	Cluster- 3 3 HP DC - Surface Pump with normal controller	1	Nos		
22	Cluster- 3 3 HP AC - Surface Pump with normal controller	1	Nos		
23	Cluster- 3 3 HP DC - Surface Pump with USPC	1	Nos		
24	Cluster- 3 3 HP AC - Surface Pump with USPC	1	Nos		
25	Cluster- 3 5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
26	Cluster- 3 5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
27	Cluster- 3 5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
28	Cluster- 3 5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
29	Cluster- 3 5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
30	Cluster- 3 5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
31	Cluster- 3 5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
32	Cluster- 3 5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
33	Cluster- 3 5 HP DC - Surface Pump with normal controller	1	Nos		
34	Cluster- 3 5 HP AC - Surface Pump with normal controller	1	Nos		
35	Cluster- 3 5 HP DC - Surface Pump with USPC	1	Nos		
36	Cluster- 3 5 HP AC - Surface Pump with USPC	1	Nos		
37	Cluster- 3 7.5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
38	Cluster- 3 7.5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
39	Cluster- 3 7.5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
40	Cluster- 3 7.5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
41	Cluster- 3 7.5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		

42	Cluster- 3 7.5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
43	Cluster- 3 7.5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
44	Cluster- 3 7.5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
45	Cluster- 3 7.5 HP DC - Surface Pump with normal controller	1	Nos		
46	Cluster- 3 7.5 HP AC - Surface Pump with normal controller	1	Nos		
47	Cluster- 3 7.5 HP DC - Surface Pump with USPC	1	Nos		
48	Cluster- 3 7.5 HP AC - Surface Pump with USPC	1	Nos		
49	Cluster- 3 10 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
50	Cluster- 3 10 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
51	Cluster- 3 10 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
52	Cluster- 3 10 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
53	Cluster- 3 10 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
54	Cluster- 3 10 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
55	Cluster- 3 10 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
56	Cluster- 3 10 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
57	Cluster- 3 10 HP DC - Surface Pump with normal controller	1	Nos		
58	Cluster- 3 10 HP AC - Surface Pump with normal controller	1	Nos		
59	Cluster- 3 10 HP DC - Surface Pump with USPC	1	Nos		
60	Cluster- 3 10 HP AC - Surface Pump with USPC	1	Nos		
For Cluster 4 - Maharashtra					
1	Cluster- 4 1 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
2	Cluster- 4 1 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
3	Cluster- 4 1 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
4	Cluster- 4 1 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
5	Cluster- 4 1 HP DC - Surface Pump with normal controller	1	Nos		
6	Cluster- 4 1 HP AC - Surface Pump with normal controller	1	Nos		
7	Cluster- 4 2 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
8	Cluster- 4 2 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
9	Cluster- 4 2 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
10	Cluster- 4 2 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		

11	Cluster- 4 2 HP DC - Surface Pump with normal controller	1	Nos		
12	Cluster- 4 2 HP AC - Surface Pump with normal controller	1	Nos		
13	Cluster- 4 3 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
14	Cluster- 4 3 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
15	Cluster- 4 3 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
16	Cluster- 4 3 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
17	Cluster- 4 3 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
18	Cluster- 4 3 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
19	Cluster- 4 3 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
20	Cluster- 4 3 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
21	Cluster- 4 3 HP DC - Surface Pump with normal controller	1	Nos		
22	Cluster- 4 3 HP AC - Surface Pump with normal controller	1	Nos		
23	Cluster- 4 3 HP DC - Surface Pump with USPC	1	Nos		
24	Cluster- 4 3 HP AC - Surface Pump with USPC	1	Nos		
25	Cluster- 4 5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
26	Cluster- 4 5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
27	Cluster- 4 5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
28	Cluster- 4 5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
29	Cluster- 4 5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
30	Cluster- 4 5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
31	Cluster- 4 5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
32	Cluster- 4 5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
33	Cluster- 4 5 HP DC - Surface Pump with normal controller	1	Nos		
34	Cluster- 4 5 HP AC - Surface Pump with normal controller	1	Nos		
35	Cluster- 4 5 HP DC - Surface Pump with USPC	1	Nos		
36	Cluster- 4 5 HP AC - Surface Pump with USPC	1	Nos		
37	Cluster- 4 7.5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
38	Cluster- 4 7.5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
39	Cluster- 4 7.5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
40	Cluster- 4 7.5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		

41	Cluster- 4 7.5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
42	Cluster- 4 7.5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
43	Cluster- 4 7.5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
44	Cluster- 4 7.5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
45	Cluster- 4 7.5 HP DC - Surface Pump with normal controller	1	Nos		
46	Cluster- 4 7.5 HP AC - Surface Pump with normal controller	1	Nos		
47	Cluster- 4 7.5 HP DC - Surface Pump with USPC	1	Nos		
48	Cluster- 4 7.5 HP AC - Surface Pump with USPC	1	Nos		
49	Cluster- 4 10 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
50	Cluster- 4 10 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
51	Cluster- 4 10 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
52	Cluster- 4 10 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
53	Cluster- 4 10 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
54	Cluster- 4 10 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
55	Cluster- 4 10 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
56	Cluster- 4 10 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
57	Cluster- 4 10 HP DC - Surface Pump with normal controller	1	Nos		
58	Cluster- 4 10 HP AC - Surface Pump with normal controller	1	Nos		
59	Cluster- 4 10 HP DC - Surface Pump with USPC	1	Nos		
60	Cluster- 4 10 HP AC - Surface Pump with USPC	1	Nos		
For Cluster 5 - Rajasthan					
1	Cluster- 5 1 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
2	Cluster- 5 1 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
3	Cluster- 5 1 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
4	Cluster- 5 1 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
5	Cluster- 5 1 HP DC - Surface Pump with normal controller	1	Nos		
6	Cluster- 5 1 HP AC - Surface Pump with normal controller	1	Nos		
7	Cluster- 5 2 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
8	Cluster- 5 2 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
9	Cluster- 5 2 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		

10	Cluster- 5 2 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
11	Cluster- 5 2 HP DC - Surface Pump with normal controller	1	Nos		
12	Cluster- 5 2 HP AC - Surface Pump with normal controller	1	Nos		
13	Cluster- 5 3 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
14	Cluster- 5 3 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
15	Cluster- 5 3 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
16	Cluster- 5 3 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
17	Cluster- 5 3 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
18	Cluster- 5 3 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
19	Cluster- 5 3 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
20	Cluster- 5 3 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
21	Cluster- 5 3 HP DC - Surface Pump with normal controller	1	Nos		
22	Cluster- 5 3 HP AC - Surface Pump with normal controller	1	Nos		
23	Cluster- 5 3 HP DC - Surface Pump with USPC	1	Nos		
24	Cluster- 5 3 HP AC - Surface Pump with USPC	1	Nos		
25	Cluster- 5 5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
26	Cluster- 5 5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
27	Cluster- 5 5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
28	Cluster- 5 5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
29	Cluster- 5 5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
30	Cluster- 5 5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
31	Cluster- 5 5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
32	Cluster- 5 5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
33	Cluster- 5 5 HP DC - Surface Pump with normal controller	1	Nos		
34	Cluster- 5 5 HP AC - Surface Pump with normal controller	1	Nos		
35	Cluster- 5 5 HP DC - Surface Pump with USPC	1	Nos		
36	Cluster- 5 5 HP AC - Surface Pump with USPC	1	Nos		
37	Cluster- 5 7.5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
38	Cluster- 5 7.5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
39	Cluster- 5 7.5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		

40	Cluster- 5 7.5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
41	Cluster- 5 7.5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
42	Cluster- 5 7.5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
43	Cluster- 5 7.5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
44	Cluster- 5 7.5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
45	Cluster- 5 7.5 HP DC - Surface Pump with normal controller	1	Nos		
46	Cluster- 5 7.5 HP AC - Surface Pump with normal controller	1	Nos		
47	Cluster- 5 7.5 HP DC - Surface Pump with USPC	1	Nos		
48	Cluster- 5 7.5 HP AC - Surface Pump with USPC	1	Nos		
49	Cluster- 5 10 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
50	Cluster- 5 10 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
51	Cluster- 5 10 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
52	Cluster- 5 10 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
53	Cluster- 5 10 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
54	Cluster- 5 10 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
55	Cluster- 5 10 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
56	Cluster- 5 10 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
57	Cluster- 5 10 HP DC - Surface Pump with normal controller	1	Nos		
58	Cluster- 5 10 HP AC - Surface Pump with normal controller	1	Nos		
59	Cluster- 5 10 HP DC - Surface Pump with USPC	1	Nos		
60	Cluster- 5 10 HP AC - Surface Pump with USPC	1	Nos		
For Cluster 6 - Uttar Pradesh					
1	Cluster- 6 1 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
2	Cluster- 6 1 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
3	Cluster- 6 1 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
4	Cluster- 6 1 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
5	Cluster- 6 1 HP DC - Surface Pump with normal controller	1	Nos		
6	Cluster- 6 1 HP AC - Surface Pump with normal controller	1	Nos		
7	Cluster- 6 2 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
8	Cluster- 6 2 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		

9	Cluster- 6 2 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
10	Cluster- 6 2 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
11	Cluster- 6 2 HP DC - Surface Pump with normal controller	1	Nos		
12	Cluster- 6 2 HP AC - Surface Pump with normal controller	1	Nos		
13	Cluster- 6 3 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
14	Cluster- 6 3 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
15	Cluster- 6 3 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
16	Cluster- 6 3 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
17	Cluster- 6 3 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
18	Cluster- 6 3 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
19	Cluster- 6 3 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
20	Cluster- 6 3 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
21	Cluster- 6 3 HP DC - Surface Pump with normal controller	1	Nos		
22	Cluster- 6 3 HP AC - Surface Pump with normal controller	1	Nos		
23	Cluster- 6 3 HP DC - Surface Pump with USPC	1	Nos		
24	Cluster- 6 3 HP AC - Surface Pump with USPC	1	Nos		
25	Cluster- 6 5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
26	Cluster- 6 5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
27	Cluster- 6 5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
28	Cluster- 6 5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
29	Cluster- 6 5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
30	Cluster- 6 7 5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
31	Cluster- 6 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
32	Cluster- 6 5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
33	Cluster- 6 5 HP DC - Surface Pump with normal controller	1	Nos		
34	Cluster- 6 5 HP AC - Surface Pump with normal controller	1	Nos		
35	Cluster- 6 5 HP DC - Surface Pump with USPC	1	Nos		
36	Cluster- 6 5 HP AC - Surface Pump with USPC	1	Nos		
37	Cluster- 6 7.5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
38	Cluster- 6 7.5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		

39	Cluster- 6 7.5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
40	Cluster- 6 7.5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
41	Cluster- 6 7.5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
42	Cluster- 6 7.5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
43	Cluster- 6 7.5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
44	Cluster- 6 7.5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
45	Cluster- 6 7.5 HP DC - Surface Pump with normal controller	1	Nos		
46	Cluster- 6 7.5 HP AC - Surface Pump with normal controller	1	Nos		
47	Cluster- 6 7.5 HP DC - Surface Pump with USPC	1	Nos		
48	Cluster- 6 7.5 HP AC - Surface Pump with USPC	1	Nos		
49	Cluster- 6 10 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
50	Cluster- 6 10 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
51	Cluster- 6 10 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
52	Cluster- 6 10 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
53	Cluster- 6 10 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
54	Cluster- 6 10 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
55	Cluster- 6 10 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
56	Cluster- 6 10 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
57	Cluster- 6 10 HP DC - Surface Pump with normal controller	1	Nos		
58	Cluster- 6 10 HP AC - Surface Pump with normal controller	1	Nos		
59	Cluster- 6 10 HP DC - Surface Pump with USPC	1	Nos		
60	Cluster- 6 10 HP AC - Surface Pump with USPC	1	Nos		
For Cluster 7 - Tripura					
1	Cluster- 7 1 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
2	Cluster- 7 1 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
3	Cluster- 7 1 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
4	Cluster- 7 1 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
5	Cluster- 7 1 HP DC - Surface Pump with normal controller	1	Nos		
6	Cluster- 7 1 HP AC - Surface Pump with normal controller	1	Nos		
7	Cluster- 7 2 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		

8	Cluster- 7 2 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
9	Cluster- 7 2 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
10	Cluster- 7 2 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
11	Cluster- 7 2 HP DC - Surface Pump with normal controller	1	Nos		
12	Cluster- 7 2 HP AC - Surface Pump with normal controller	1	Nos		
13	Cluster- 7 3 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
14	Cluster- 7 3 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
15	Cluster- 7 3 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
16	Cluster- 7 3 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
17	Cluster- 7 3 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
18	Cluster- 7 3 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
19	Cluster- 7 3 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
20	Cluster- 7 3 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
21	Cluster- 7 3 HP DC - Surface Pump with normal controller	1	Nos		
22	Cluster- 7 3 HP AC - Surface Pump with normal controller	1	Nos		
23	Cluster- 7 3 HP DC - Surface Pump with USPC	1	Nos		
24	Cluster- 7 3 HP AC - Surface Pump with USPC	1	Nos		
25	Cluster- 7 5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
26	Cluster- 7 5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
27	Cluster- 7 5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
28	Cluster- 7 5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
29	Cluster- 7 5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
30	Cluster- 7 5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
31	Cluster- 7 5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
32	Cluster- 7 5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
33	Cluster- 7 5 HP DC - Surface Pump with normal controller	1	Nos		
34	Cluster- 7 5 HP AC - Surface Pump with normal controller	1	Nos		
35	Cluster- 7 5 HP DC - Surface Pump with USPC	1	Nos		
36	Cluster- 7 5 HP AC - Surface Pump with USPC	1	Nos		
37	Cluster- 7 7.5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		

38	Cluster- 7 7.5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
39	Cluster- 7 7.5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
40	Cluster- 7 7.5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
41	Cluster- 7 7.5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
42	Cluster- 7 7.5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
43	Cluster- 7 7.5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
44	Cluster- 7 7.5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
45	Cluster- 7 7.5 HP DC - Surface Pump with normal controller	1	Nos		
46	Cluster- 7 7.5 HP AC - Surface Pump with normal controller	1	Nos		
47	Cluster- 7 7.5 HP DC - Surface Pump with USPC	1	Nos		
48	Cluster- 7 7.5 HP AC - Surface Pump with USPC	1	Nos		
49	Cluster- 7 10 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
50	Cluster- 7 10 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
51	Cluster- 7 10 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
52	Cluster- 7 10 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
53	Cluster- 7 10 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
54	Cluster- 7 10 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
55	Cluster- 7 10 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
56	Cluster- 7 10 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
57	Cluster- 7 10 HP DC - Surface Pump with normal controller	1	Nos		
58	Cluster- 7 10 HP AC - Surface Pump with normal controller	1	Nos		
59	Cluster- 7 10 HP DC - Surface Pump with USPC	1	Nos		
60	Cluster- 7 10 HP AC - Surface Pump with USPC	1	Nos		
For Cluster 8 - Jammu & Kashmir, Ladakh					
1	Cluster- 8 1 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
2	Cluster- 8 1 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
3	Cluster- 8 1 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
4	Cluster- 8 1 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
5	Cluster- 8 1 HP DC - Surface Pump with normal controller	1	Nos		

6	Cluster- 8 3 1 HP AC - Surface Pump with normal controller	1	Nos		
7	Cluster- 8 2 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
8	Cluster- 8 2 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
9	Cluster- 8 2 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
10	Cluster- 8 2 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
11	Cluster- 8 2 HP DC - Surface Pump with normal controller	1	Nos		
12	Cluster- 8 2 HP AC - Surface Pump with normal controller	1	Nos		
13	Cluster- 8 3 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
14	Cluster- 8 3 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
15	Cluster- 8 3 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
16	Cluster- 8 3 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
17	Cluster- 8 3 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
18	Cluster- 8 3 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
19	Cluster- 8 3 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
20	Cluster- 8 3 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
21	Cluster- 8 3 HP DC - Surface Pump with normal controller	1	Nos		
22	Cluster- 8 3 HP AC - Surface Pump with normal controller	1	Nos		
23	Cluster- 8 3 HP DC - Surface Pump with USPC	1	Nos		
24	Cluster- 8 3 HP AC - Surface Pump with USPC	1	Nos		
25	Cluster- 8 5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
26	Cluster- 8 5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
27	Cluster- 8 5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
28	Cluster- 8 5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
29	Cluster- 8 5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
30	Cluster- 8 5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
31	Cluster- 8 5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
32	Cluster- 8 5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
33	Cluster- 8 5 HP DC - Surface Pump with normal controller	1	Nos		
34	Cluster- 8 5 HP AC - Surface Pump with normal controller	1	Nos		
35	Cluster- 8 5 HP DC - Surface Pump with USPC	1	Nos		

36	Cluster- 8 5 HP AC - Surface Pump with USPC	1	Nos		
37	Cluster- 8 7.5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
38	Cluster- 8 7.5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
39	Cluster- 8 7.5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
40	Cluster- 8 7.5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
41	Cluster- 8 7.5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
42	Cluster- 8 7.5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
43	Cluster- 8 7.5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
44	Cluster- 8 7.5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
45	Cluster- 8 7.5 HP DC - Surface Pump with normal controller	1	Nos		
46	Cluster- 8 7.5 HP AC - Surface Pump with normal controller	1	Nos		
47	Cluster- 8 7.5 HP DC - Surface Pump with USPC	1	Nos		
48	Cluster- 8 7.5 HP AC - Surface Pump with USPC	1	Nos		
49	Cluster- 8 10 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
50	Cluster- 8 10 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
51	Cluster- 8 10 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
52	Cluster- 8 10 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
53	Cluster- 8 10 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
54	Cluster- 8 10 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
55	Cluster- 8 10 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
56	Cluster- 8 10 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
57	Cluster- 8 10 HP DC - Surface Pump with normal controller	1	Nos		
58	Cluster- 8 10 HP AC - Surface Pump with normal controller	1	Nos		
59	Cluster- 8 10 HP DC - Surface Pump with USPC	1	Nos		
60	Cluster- 8 10 HP AC - Surface Pump with USPC	1	Nos		
For Cluster 9 – Bihar & Jharkhand					
1	Cluster- 9 1 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
2	Cluster- 9 1 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
3	Cluster- 9 1 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
4	Cluster- 9 1 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		

5	Cluster- 9 1 HP DC - Surface Pump with normal controller	1	Nos		
6	Cluster- 9 1 HP AC - Surface Pump with normal controller	1	Nos		
7	Cluster- 9 2 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
8	Cluster- 9 2 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
9	Cluster- 9 2 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
10	Cluster- 9 2 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
11	Cluster- 9 2 HP DC - Surface Pump with normal controller	1	Nos		
12	Cluster- 9 2 HP AC - Surface Pump with normal controller	1	Nos		
13	Cluster- 9 3 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
14	Cluster- 9 3 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
15	Cluster- 9 3 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
16	Cluster- 9 3 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
17	Cluster- 9 3 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
18	Cluster- 9 3 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
19	Cluster- 9 3 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
20	Cluster- 9 3 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
21	Cluster- 9 3 HP DC - Surface Pump with normal controller	1	Nos		
22	Cluster- 9 3 HP AC - Surface Pump with normal controller	1	Nos		
23	Cluster- 9 3 HP DC - Surface Pump with USPC	1	Nos		
24	Cluster- 9 3 HP AC - Surface Pump with USPC	1	Nos		
25	Cluster- 9 5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
26	Cluster- 9 5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
27	Cluster- 9 5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
28	Cluster- 9 5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
29	Cluster- 9 5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
30	Cluster- 9 5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
31	Cluster- 9 5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
32	Cluster- 9 5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
33	Cluster- 9 5 HP DC - Surface Pump with normal controller	1	Nos		
34	Cluster- 9 5 HP AC - Surface Pump with normal controller	1	Nos		

35	Cluster- 9 5 HP DC - Surface Pump with USPC	1	Nos		
36	Cluster- 9 5 HP AC - Surface Pump with USPC	1	Nos		
37	Cluster- 9 7.5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
38	Cluster- 9 7.5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
39	Cluster- 9 7.5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
40	Cluster- 9 7.5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
41	Cluster- 9 7.5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
42	Cluster- 9 7.5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
43	Cluster- 9 7.5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
44	Cluster- 9 7.5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
45	Cluster- 9 7.5 HP DC - Surface Pump with normal controller	1	Nos		
46	Cluster- 9 7.5 HP AC - Surface Pump with normal controller	1	Nos		
47	Cluster- 9 7.5 HP DC - Surface Pump with USPC	1	Nos		
48	Cluster- 9 7.5 HP AC - Surface Pump with USPC	1	Nos		
49	Cluster- 9 10 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
50	Cluster- 9 10 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
51	Cluster- 9 10 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
52	Cluster- 9 10 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
53	Cluster- 9 10 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
54	Cluster- 9 10 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
55	Cluster- 9 10 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
56	Cluster- 9 10 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
57	Cluster- 9 10 HP DC - Surface Pump with normal controller	1	Nos		
58	Cluster- 9 10 HP AC - Surface Pump with normal controller	1	Nos		
59	Cluster- 9 10 HP DC - Surface Pump with USPC	1	Nos		
60	Cluster- 9 10 HP AC - Surface Pump with USPC	1	Nos		
For Cluster 10 – Karnataka & Goa					
1	Cluster- 10 1 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
2	Cluster- 10 1 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
3	Cluster- 10 1 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		

4	Cluster- 10 1 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
5	Cluster- 10 1 HP DC - Surface Pump with normal controller	1	Nos		
6	Cluster- 10 1 HP AC - Surface Pump with normal controller	1	Nos		
7	Cluster- 10 2 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
8	Cluster- 10 2 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
9	Cluster- 10 2 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
10	Cluster- 10 2 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
11	Cluster- 10 2 HP DC - Surface Pump with normal controller	1	Nos		
12	Cluster- 10 2 HP AC - Surface Pump with normal controller	1	Nos		
13	Cluster- 10 3 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
14	Cluster- 10 3 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
15	Cluster- 10 3 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
16	Cluster- 10 3 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
17	Cluster- 10 3 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
18	Cluster- 10 3 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
19	Cluster- 10 3 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
20	Cluster- 10 3 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
21	Cluster- 10 3 HP DC - Surface Pump with normal controller	1	Nos		
22	Cluster- 10 3 HP AC - Surface Pump with normal controller	1	Nos		
23	Cluster- 10 3 HP DC - Surface Pump with USPC	1	Nos		
24	Cluster- 10 3 HP AC - Surface Pump with USPC	1	Nos		
25	Cluster- 10 5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
26	Cluster- 10 5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
27	Cluster- 10 5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
28	Cluster- 10 5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
29	Cluster- 10 5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
30	Cluster- 10 5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
31	Cluster- 10 5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
32	Cluster- 10 5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
33	Cluster- 10 5 HP DC - Surface Pump with normal controller	1	Nos		

34	Cluster- 10 5 HP AC - Surface Pump with normal controller	1	Nos		
35	Cluster- 10 5 HP DC - Surface Pump with USPC	1	Nos		
36	Cluster- 10 5 HP AC - Surface Pump with USPC	1	Nos		
37	Cluster-10 7.5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
38	Cluster- 10 7.5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
39	Cluster- 10 7.5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
40	Cluster- 10 7.5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
41	Cluster- 10 7.5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
42	Cluster- 10 7.5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
43	Cluster- 10 7.5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
44	Cluster- 10 7.5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
45	Cluster- 10 7.5 HP DC - Surface Pump with normal controller	1	Nos		
46	Cluster- 10 7.5 HP AC - Surface Pump with normal controller	1	Nos		
47	Cluster- 10 7.5 HP DC - Surface Pump with USPC	1	Nos		
48	Cluster- 10 7.5 HP AC - Surface Pump with USPC	1	Nos		
49	Cluster- 10 10 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
50	Cluster- 10 10 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
51	Cluster- 10 10 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
52	Cluster- 10 10 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
53	Cluster- 10 10 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
54	Cluster- 10 10 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
55	Cluster- 10 10 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
56	Cluster- 10 10 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
57	Cluster- 10 10 HP DC - Surface Pump with normal controller	1	Nos		
58	Cluster- 10 10 HP AC - Surface Pump with normal controller	1	Nos		
59	Cluster- 10 10 HP DC - Surface Pump with USPC	1	Nos		
60	Cluster- 10 10 HP AC - Surface Pump with USPC	1	Nos		

For Cluster 11 – Himachal Pradesh & Uttarakhand					
1	Cluster- 11 1 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
2	Cluster- 11 1 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
3	Cluster- 11 1 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
4	Cluster- 11 1 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
5	Cluster- 11 1 HP DC - Surface Pump with normal controller	1	Nos		
6	Cluster- 11 1 HP AC - Surface Pump with normal controller	1	Nos		
7	Cluster- 11 2 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
8	Cluster- 11 2 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
9	Cluster- 11 2 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
10	Cluster- 11 2 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
11	Cluster- 11 2 HP DC - Surface Pump with normal controller	1	Nos		
12	Cluster- 11 2 HP AC - Surface Pump with normal controller	1	Nos		
13	Cluster- 11 3 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
14	Cluster- 11 3 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
15	Cluster- 11 3 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
16	Cluster- 11 3 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
17	Cluster- 11 3 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
18	Cluster- 11 3 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
19	Cluster- 11 3 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
20	Cluster- 11 3 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
21	Cluster- 11 3 HP DC - Surface Pump with normal controller	1	Nos		
22	Cluster- 11 3 HP AC - Surface Pump with normal controller	1	Nos		
23	Cluster- 11 3 HP DC - Surface Pump with USPC	1	Nos		
24	Cluster- 11 3 HP AC - Surface Pump with USPC	1	Nos		
25	Cluster- 11 5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
26	Cluster- 11 5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
27	Cluster- 11 5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
28	Cluster- 11 5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
29	Cluster- 11 5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		

30	Cluster- 11 5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
31	Cluster- 11 5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
32	Cluster- 11 5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
33	Cluster- 11 5 HP DC - Surface Pump with normal controller	1	Nos		
34	Cluster- 11 5 HP AC - Surface Pump with normal controller	1	Nos		
35	Cluster- 11 5 HP DC - Surface Pump with USPC	1	Nos		
36	Cluster- 11 5 HP AC - Surface Pump with USPC	1	Nos		
37	Cluster- 11 7.5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
38	Cluster- 11 7.5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
39	Cluster-11 7.5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
40	Cluster- 11 7.5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
41	Cluster-11 7.5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
42	Cluster- 11 7.5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
43	Cluster- 11 7.5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
44	Cluster- 11 7.5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
45	Cluster- 11 7.5 HP DC - Surface Pump with normal controller	1	Nos		
46	Cluster-11 7.5 HP AC - Surface Pump with normal controller	1	Nos		
47	Cluster- 11 7.5 HP DC - Surface Pump with USPC	1	Nos		
48	Cluster- 11 7.5 HP AC - Surface Pump with USPC	1	Nos		
49	Cluster- 11 10 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
50	Cluster- 11 10 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
51	Cluster- 11 10 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
52	Cluster- 11 10 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
53	Cluster- 11 10 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
54	Cluster- 1110 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
55	Cluster- 1110 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
56	Cluster- 11 10 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		

57	Cluster- 11 10 HP DC - Surface Pump with normal controller	1	Nos		
58	Cluster- 11 10 HP AC - Surface Pump with normal controller	1	Nos		
59	Cluster- 11 10 HP DC - Surface Pump with USPC	1	Nos		
60	Cluster- 1110 HP AC - Surface Pump with USPC	1	Nos		
For Cluster 12-Assam, West Bengal,Odisha					
1	Cluster-12 1 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
2	Cluster- 12 1 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
3	Cluster-12 1 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
4	Cluster- 12 1 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
5	Cluster-12 1 HP DC - Surface Pump with normal controller	1	Nos		
6	Cluster-12 1 HP AC - Surface Pump with normal controller	1	Nos		
7	Cluster-12 2 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
8	Cluster-12 2 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
9	Cluster-12 2 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
10	Cluster-12 2 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
11	Cluster-12 2 HP DC - Surface Pump with normal controller	1	Nos		
12	Cluster-12 2 HP AC - Surface Pump with normal controller	1	Nos		
13	Cluster- 12 3 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
14	Cluster- 12 3 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
15	Cluster-12 3 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
16	Cluster- 12 3 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
17	Cluster- 12 3 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
18	Cluster- 12 3 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
19	Cluster- 12 3 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
20	Cluster- 12 3 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
21	Cluster- 12 3 HP DC - Surface Pump with normal controller	1	Nos		
22	Cluster-12 3 HP AC - Surface Pump with normal controller	1	Nos		
23	Cluster- 12 3 HP DC - Surface Pump with USPC	1	Nos		
24	Cluster- 12 3 HP AC - Surface Pump with USPC	1	Nos		
25	Cluster- 12 5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		

26	Cluster- 12 5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
27	Cluster- 12 5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
28	Cluster- 12 5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
29	Cluster- 12 5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
30	Cluster- 12 5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
31	Cluster- 12 5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
32	Cluster- 12 5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
33	Cluster- 12 5 HP DC - Surface Pump with normal controller	1	Nos		
34	Cluster- 12 5 HP AC - Surface Pump with normal controller	1	Nos		
35	Cluster- 12 5 HP DC - Surface Pump with USPC	1	Nos		
36	Cluster- 12 5 HP AC - Surface Pump with USPC	1	Nos		
37	Cluster- 12 7.5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
38	Cluster- 12 7.5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
39	Cluster- 12 7.5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
40	Cluster- 12 7.5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
41	Cluster- 12 7.5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
42	Cluster- 12 7.5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
43	Cluster- 12 7.5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
44	Cluster- 12 7.5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
45	Cluster- 12 7.5 HP DC - Surface Pump with normal controller	1	Nos		
46	Cluster- 12 7.5 HP AC - Surface Pump with normal controller	1	Nos		
47	Cluster- 12 7.5 HP DC - Surface Pump with USPC	1	Nos		
48	Cluster- 12 7.5 HP AC - Surface Pump with USPC	1	Nos		
49	Cluster- 12 10 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
50	Cluster- 12 10 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
51	Cluster- 12 10 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
52	Cluster- 12 10 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		

53	Cluster- 12 10 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
54	Cluster- 12 10 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
55	Cluster- 12 10 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
56	Cluster- 12 10 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
57	Cluster- 12 10 HP DC - Surface Pump with normal controller	1	Nos		
58	Cluster- 12 10 HP AC - Surface Pump with normal controller	1	Nos		
59	Cluster- 12 10 HP DC - Surface Pump with USPC	1	Nos		
60	Cluster- 12 10 HP AC - Surface Pump with USPC	1	Nos		
For Cluster 13-Gujarat,Dadra & Nagar Haveli, Daman & Diu-					
1	Cluster- 13 1 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
2	Cluster- 13 1 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
3	Cluster- 13 1 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
4	Cluster- 13 1 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
5	Cluster- 13 1 HP DC - Surface Pump with normal controller	1	Nos		
6	Cluster- 13 1 HP AC - Surface Pump with normal controller	1	Nos		
7	Cluster- 13 2 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
8	Cluster- 13 2 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
9	Cluster- 13 2 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
10	Cluster- 13 2 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
11	Cluster- 13 2 HP DC - Surface Pump with normal controller	1	Nos		
12	Cluster- 13 2 HP AC - Surface Pump with normal controller	1	Nos		
13	Cluster- 13 3 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
14	Cluster- 13 3 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
15	Cluster- 13 3 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
16	Cluster- 13 3 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
17	Cluster- 13 3 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
18	Cluster- 13 3 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
19	Cluster- 13 3 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
20	Cluster- 13 3 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
21	Cluster- 13 3 HP DC - Surface Pump with normal controller	1	Nos		

22	Cluster- 13 3 HP AC - Surface Pump with normal controller	1	Nos		
23	Cluster- 13 3 HP DC - Surface Pump with USPC	1	Nos		
24	Cluster- 13 3 HP AC - Surface Pump with USPC	1	Nos		
25	Cluster- 13 5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
26	Cluster- 13 5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
27	Cluster- 13 5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
28	Cluster- 13 5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
29	Cluster- 13 5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
30	Cluster- 13 5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
31	Cluster- 13 5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
32	Cluster- 13 5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
33	Cluster- 13 5 HP DC - Surface Pump with normal controller	1	Nos		
34	Cluster- 13 5 HP AC - Surface Pump with normal controller	1	Nos		
35	Cluster- 13 5 HP DC - Surface Pump with USPC	1	Nos		
36	Cluster- 13 5 HP AC - Surface Pump with USPC	1	Nos		
37	Cluster- 13 7.5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
38	Cluster-13 7.5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
39	Cluster- 13 7.5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
40	Cluster- 13 7.5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
41	Cluster- 13 7.5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
42	Cluster- 13 7.5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
43	Cluster- 13 7.5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
44	Cluster- 13 7.5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
45	Cluster- 13 7.5 HP DC - Surface Pump with normal controller	1	Nos		
46	Cluster- 13 7.5 HP AC - Surface Pump with normal controller	1	Nos		
47	Cluster- 13 7.5 HP DC - Surface Pump with USPC	1	Nos		
48	Cluster- 13 7.5 HP AC - Surface Pump with USPC	1	Nos		
49	Cluster- 13 10 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		

50	Cluster- 13 10 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
51	Cluster- 13 10 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
52	Cluster- 13 10 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
53	Cluster- 13 10 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
54	Cluster- 13 10 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
55	Cluster- 13 10 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
56	Cluster- 13 10 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
57	Cluster- 13 10 HP DC - Surface Pump with normal controller	1	Nos		
58	Cluster- 13 10 HP AC - Surface Pump with normal controller	1	Nos		
59	Cluster- 13 10 HP DC - Surface Pump with USPC	1	Nos		
60	Cluster- 13 10 HP AC - Surface Pump with USPC	1	Nos		
For Cluster 14-Punjab, Chandigarh &Delhi					
1	Cluster- 14 1 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
2	Cluster- 14 1 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
3	Cluster- 14 1 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
4	Cluster- 14 1 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
5	Cluster- 14 1 HP DC - Surface Pump with normal controller	1	Nos		
6	Cluster- 14 1 HP AC - Surface Pump with normal controller	1	Nos		
7	Cluster- 14 2 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
8	Cluster- 14 2 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
9	Cluster- 14 2 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
10	Cluster- 14 2 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
11	Cluster- 14 2 HP DC - Surface Pump with normal controller	1	Nos		
12	Cluster- 14 2 HP AC - Surface Pump with normal controller	1	Nos		
13	Cluster- 14 3 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
14	Cluster- 14 3 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
15	Cluster- 14 3 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
16	Cluster- 14 3 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
17	Cluster- 14 3 HP DC - Submersible Water Filled Pump with USPC	1	Nos		

18	Cluster- 14 3 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
19	Cluster- 14 3 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
20	Cluster- 14 3 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
21	Cluster- 14 3 HP DC - Surface Pump with normal controller	1	Nos		
22	Cluster- 14 3 HP AC - Surface Pump with normal controller	1	Nos		
23	Cluster- 14 3 HP DC - Surface Pump with USPC	1	Nos		
24	Cluster- 14 3 HP AC - Surface Pump with USPC	1	Nos		
25	Cluster- 14 5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
26	Cluster- 14 5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
27	Cluster- 14 5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
28	Cluster- 14 5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
29	Cluster- 14 5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
30	Cluster- 14 5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
31	Cluster- 14 5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
32	Cluster- 14 5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
33	Cluster- 14 5 HP DC - Surface Pump with normal controller	1	Nos		
34	Cluster- 14 5 HP AC - Surface Pump with normal controller	1	Nos		
35	Cluster- 14 5 HP DC - Surface Pump with USPC	1	Nos		
36	Cluster- 14 5 HP AC - Surface Pump with USPC	1	Nos		
37	Cluster- 14 7.5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
38	Cluster- 14 7.5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
39	Cluster- 14 7.5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
40	Cluster- 14 7.5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
41	Cluster- 14 7.5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
42	Cluster- 14 7.5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
43	Cluster- 14 7.5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
44	Cluster- 14 7.5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
45	Cluster- 14 7.5 HP DC - Surface Pump with normal controller	1	Nos		

46	Cluster- 14 7.5 HP AC - Surface Pump with normal controller	1	Nos		
47	Cluster- 14 7.5 HP DC - Surface Pump with USPC	1	Nos		
48	Cluster- 14 7.5 HP AC - Surface Pump with USPC	1	Nos		
49	Cluster- 14 10 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
50	Cluster- 14 10 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
51	Cluster- 14 10 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
52	Cluster- 14 10 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
53	Cluster- 14 10 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
54	Cluster- 14 10 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
55	Cluster- 14 10 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
56	Cluster- 14 10 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
57	Cluster- 14 10 HP DC - Surface Pump with normal controller	1	Nos		
58	Cluster- 14 10 HP AC - Surface Pump with normal controller	1	Nos		
59	Cluster-14 10 HP DC - Surface Pump with USPC	1	Nos		
60	Cluster- 14 10 HP AC - Surface Pump with USPC	1	Nos		
For Cluster 15-Tamil Nadu, Andhra Pradesh, Kerala, Telangana & Puducherry					
1	Cluster- 15 1 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
2	Cluster- 15 1 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
3	Cluster- 15 1 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
4	Cluster- 15 1 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
5	Cluster- 15 1 HP DC - Surface Pump with normal controller	1	Nos		
6	Cluster- 15 1 HP AC - Surface Pump with normal controller	1	Nos		
7	Cluster- 15 2 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
8	Cluster- 15 2 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
9	Cluster- 15 2 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
10	Cluster- 15 2 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
11	Cluster- 15 2 HP DC - Surface Pump with normal controller	1	Nos		
12	Cluster- 15 2 HP AC - Surface Pump with normal controller	1	Nos		

13	Cluster- 15 3 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
14	Cluster- 15 3 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
15	Cluster- 15 3 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
16	Cluster- 15 3 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
17	Cluster- 15 3 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
18	Cluster- 15 3 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
19	Cluster- 15 3 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
20	Cluster- 15 3 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
21	Cluster- 15 3 HP DC - Surface Pump with normal controller	1	Nos		
22	Cluster- 15 3 HP AC - Surface Pump with normal controller	1	Nos		
23	Cluster- 15 3 HP DC - Surface Pump with USPC	1	Nos		
24	Cluster- 15 3 HP AC - Surface Pump with USPC	1	Nos		
25	Cluster- 15 5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
26	Cluster- 15 5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
27	Cluster- 15 5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
28	Cluster- 15 5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
29	Cluster- 15 5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
30	Cluster- 15 5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
31	Cluster- 15 5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
32	Cluster- 15 5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
33	Cluster- 15 5 HP DC - Surface Pump with normal controller	1	Nos		
34	Cluster- 15 5 HP AC - Surface Pump with normal controller	1	Nos		
35	Cluster- 15 5 HP DC - Surface Pump with USPC	1	Nos		
36	Cluster- 15 5 HP AC - Surface Pump with USPC	1	Nos		
37	Cluster- 15 7.5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
38	Cluster- 15 7.5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
39	Cluster- 15 7.5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
40	Cluster- 15 7.5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		

41	Cluster- 15 7.5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
42	Cluster- 15 7.5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
43	Cluster- 15 7.5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
44	Cluster- 15 7.5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
45	Cluster- 15 7.5 HP DC - Surface Pump with normal controller	1	Nos		
46	Cluster- 15 7.5 HP AC - Surface Pump with normal controller	1	Nos		
47	Cluster- 15 7.5 HP DC - Surface Pump with USPC	1	Nos		
48	Cluster- 15 7.5 HP AC - Surface Pump with USPC	1	Nos		
49	Cluster- 15 10 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
50	Cluster- 15 10 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
51	Cluster- 15 10 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
52	Cluster- 15 10 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
53	Cluster- 15 10 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
54	Cluster- 15 10 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
55	Cluster- 15 10 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
56	Cluster- 15 10 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
57	Cluster- 15 10 HP DC - Surface Pump with normal controller	1	Nos		
58	Cluster- 15 10 HP AC - Surface Pump with normal controller	1	Nos		
59	Cluster- 15 10 HP DC - Surface Pump with USPC	1	Nos		
60	Cluster- 15 10 HP AC - Surface Pump with USPC	1	Nos		
For Cluster 16- Arunachal Pradesh, Sikkim, Manipur, Meghalaya, Mizoram, Nagaland					
1	Cluster- 16 1 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
2	Cluster- 16 1 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
3	Cluster- 16 1 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
4	Cluster- 16 1 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
5	Cluster- 16 1 HP DC - Surface Pump with normal controller	1	Nos		
6	Cluster- 16 1 HP AC - Surface Pump with normal controller	1	Nos		
7	Cluster- 16 2 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		

8	Cluster- 16 2 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
9	Cluster- 16 2 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
10	Cluster- 16 2 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
11	Cluster- 16 2 HP DC - Surface Pump with normal controller	1	Nos		
12	Cluster- 16 2 HP AC - Surface Pump with normal controller	1	Nos		
13	Cluster- 16 3 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
14	Cluster- 16 3 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
15	Cluster- 16 3 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
16	Cluster- 16 3 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
17	Cluster- 16 3 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
18	Cluster- 16 3 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
19	Cluster- 16 3 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
20	Cluster- 163 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
21	Cluster- 16 3 HP DC - Surface Pump with normal controller	1	Nos		
22	Cluster- 16 3 HP AC - Surface Pump with normal controller	1	Nos		
23	Cluster- 16 3 HP DC - Surface Pump with USPC	1	Nos		
24	Cluster- 16 3 HP AC - Surface Pump with USPC	1	Nos		
25	Cluster- 16 5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
26	Cluster- 16 5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
27	Cluster- 16 5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
28	Cluster- 16 5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
29	Cluster- 16 5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
30	Cluster- 16 5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
31	Cluster- 16 5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
32	Cluster- 16 5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
33	Cluster- 16 5 HP DC - Surface Pump with normal controller	1	Nos		
34	Cluster- 16 5 HP AC - Surface Pump with normal controller	1	Nos		
35	Cluster- 16 5 HP DC - Surface Pump with USPC	1	Nos		
36	Cluster- 16 5 HP AC - Surface Pump with USPC	1	Nos		

37	Cluster-16 7.5 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
38	Cluster- 16 7.5 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
39	Cluster- 16 7.5 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
40	Cluster- 16 7.5 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
41	Cluster- 16 7.5 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
42	Cluster- 16 7.5 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
43	Cluster- 16 7.5 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
44	Cluster- 16 7.5 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
45	Cluster- 16 7.5 HP DC - Surface Pump with normal controller	1	Nos		
46	Cluster- 16 7.5 HP AC - Surface Pump with normal controller	1	Nos		
47	Cluster- 16 7.5 HP DC - Surface Pump with USPC	1	Nos		
48	Cluster- 16 7.5 HP AC - Surface Pump with USPC	1	Nos		
49	Cluster- 16 10 HP DC - Submersible Water Filled Pump with normal controller	1	Nos		
50	Cluster- 16 10 HP AC - Submersible Water Filled Pump with normal controller	1	Nos		
51	Cluster- 16 10 HP DC - Submersible Oil Filled Pump with normal controller	1	Nos		
52	Cluster- 16 10 HP AC - Submersible Oil Filled Pump with normal controller	1	Nos		
53	Cluster- 16 10 HP DC - Submersible Water Filled Pump with USPC	1	Nos		
54	Cluster- 16 10 HP AC - Submersible Water Filled Pump with USPC	1	Nos		
55	Cluster- 16 10 HP DC - Submersible Oil Filled Pump with USPC	1	Nos		
56	Cluster- 16 10 HP AC - Submersible Oil Filled Pump with USPC	1	Nos		
57	Cluster- 16 10 HP DC - Surface Pump with normal controller	1	Nos		
58	Cluster- 16 10 HP AC - Surface Pump with normal controller	1	Nos		
59	Cluster- 16 10 HP DC - Surface Pump with USPC	1	Nos		
60	Cluster- 16 10 HP AC - Surface Pump with USPC	1	Nos		

*Bidder participating in the cluster Are Require to select items in which they wish to participate.

Other terms and conditions

1. The Bidder shall indicate in the Price Bid, the unit prices in Rs. (INR) of the Goods & Services in the prescribed format only. Bidders shall quote for the complete requirement of Goods and Services specified under the Contract on a single responsibility basis, failing which such Bids will not be taken into account for evaluation and will not be considered for award.
2. The bidder may quote for any or all heads in the price-bid format for which separate analysis/ reasonable estimation of all heads should be done by the bidder before quoting the rates in the financial bid. Any contravention may lead to rejection of offer submitted.
3. Any other item as required for commissioning the system for reliable and efficient operation to be provided within the quoted price.
4. The above prices are exclusive of GST.
5. The bidder shall submit PAN and GST Registration Certificate in support of claim of GST.
6. Please note that selection of the bidder will be done on the technically acceptable and L-1 (Lowest One) price basis for each line item. Bidder should quote for complete scope of work as defined above.
7. Prices once discovered can not be altered.

Notes:

I/We have read all the terms and conditions of the RfP/IFB/NIT and the Annexure(s) thereto and agree to accept and abide by the same in toto. The above quotation has been prepared after taking into account all the terms and conditions of the RfP/IFB/NIT.

Dated:

(SEAL)
Signature of Tenderer or
Their Authorized Representative:
Name and Address of Tenderer:
Phone No:
Fax No:

Annexure-VI

Following shall be the list of allocations approved to various States/UTs:

Cluster	State	Quantity (State-wise) 1HP-10HP	Quantity (Cluster-wise) 1HP-10HP
1	Chhattisgarh	20000	20000
2	Haryana	22000	22000
3	Madhya Pradesh	50000	50000
4	Maharashtra	100000	100000
5	Rajasthan	50000	50000
6	Uttar Pradesh	15000	15000
7	Tripura	2600	2600
8	Jammu & Kashmir	5000	5600
	Ladakh	600	
9	Bihar	1000	11000
	Jharkhand	10000	
10	Karnataka	10000	10200
	Goa	200	
11	Himachal Pradesh	1000	1100
	Uttarakhand	100	
12	Assam	500	6000
	West Bengal	500	
	Odisha	5000	
13	Gujarat	775	875
	Dadra & Nagar Haveli	50	
	Daman & Diu	50	
14	Punjab	15000	15600
	Chandigarh	100	
	Delhi	500	
15	Tamil Nadu	5000	7200
	Andhra Pradesh	1000	
	Kerala	100	
	Telangana	1000	
	Puducherry	100	
16	Arunachal Pradesh	50	800
	Sikkim	50	
	Manipur	50	
	Meghalaya	500	
	Mizoram	100	
	Nagaland	50	
	Total	**317975**	**317975**

Above quantities may be changed by States depending upon availability of budget or other reasons.

Compliance Matrix/ CHECK – LIST FOR BIDDERS

Please ensure these major Terms & Conditions before submitting you bids in order to avoid REJECTION of your offer.

Sl	Details / Terms & Conditions	Applicable for	Yes / Attached	No	Reasons for non-compliance/ Remarks
1	Bid document fee in the form of Banker's Cheque/ Demand Draft drawn in favor of "Energy Efficiency	Indian Bidders			
2	Letter of the bidder submitting the bid in the form as stipulated in the bid document i.e., as per Bid Form as **Attachment-1**	Indian Bidders			
3	Bid Security Declaration as **Attachment-2**	Indian Bidders			
	Bid document Fee exemption being MSEs / Start-up	Indian Bidders			
	Relevant Certificate of MSEs / Start-up Certificate from DIPP is required to be submitted	Indian Bidders			
	In case of SC/ST entrepreneurs belonging to MSE, documentary proof submitted	Indian Bidders			
	In case of Women entrepreneurs belonging to MSE, documentary proof submitted	Indian Bidders			
	Declaration & Undertaking By Micro & Small Scale Enterprises / Start-up Companies	Indian Bidders			
4	Relevant Documents and confirmation towards QR	Indian Bidders			
5	Duly signed and company sealed copy of whole tender document	Indian Bidders			
6	Duly filled up and attached Technical (Unpriced) Bid & all applicable formats of Tender Document	Indian Bidders			
7	Separate sheet(s) for Deviation if any, from the tender conditions with seal and signature of authorized personnel	Indian Bidders			
8	Declaration form for quoted Clusters and Type of Pump **(as per format in Attachment -11 and 12)**	Indian Bidders			
9	Certificate regarding Declaration of Local Content (**as per Format in Attachment-14**).	Indian Bidders			
10	**Attachment 15, Attachment 17, Attachment 21 of Section-6 Forms and Procedures**	Indian Bidders			
11	Self-Declaration for not been blacklisted or debarred by Central/State/UT Government or any Public sector entities duly signed and stamped at company's Letter Head. (Attachment-18 of Section-6, Forms & Procedures)				

12	Self-Declaration for regarding "Restrictions on procurement from a Bidder of a country which shares a land border with India" as per **Attachment-16**	Indian Bidders			
13	Self-Declaration duly signed and stamped at company's Letter Head for not being under debar list/undergoing debarment period on account of breach of the code of integrity under Rule 175(1)(i)(h) of the General Financial rules for giving false declarations of local content.(**Attachment-22)**	Indian Bidders			

Annexure-X

(Compliance Matrix Bid Qualification Criteria)

Technical QR	**Bidder Qualification Criteria as per Tender terms & conditions. The relevant documentary evidence like work order copies, completion certificates etc. are required to be furnished along with Technical Bid substantiating the qualification towards relevant experience / technical criteria (Documentary proof to be attached along with technical Bid).**			
ORDER /AWARD NOS.	ORDER DATE AND COMPLETION DATE	ORDER /AWARD AMOUNT	CLIENT NAME	DESCRIPTION OF ORDER/AWARD
Financial QR	**Annual turnover of the Bidder shall be as specified in tender documents in any of the three preceding financial years. Copy of the latest Audited balance sheet, Profit & Loss account and copy of IT returns required to be furnished for the one particular financial year which meets above requirement along with Technical Bid.**			
FINANCIAL YEAR (Tick as applicable)		Indicate Currency used for Financial Statement: _____		
Bidders	**ANNUAL TURNOVER**	**NET WORTH**	**Profitability**	

Other mandatory requirements		
Confirmation for Tender Terms & conditions / EMD [Please Tick (√) as applicable]		
1	Confirm that your Bid is valid as per tender terms & conditions the last date of submission of Bid	
2	Confirm your compliance to TERMS AND CONDITIONS of Bidding Document	

Note:
Documentary Evidence is attached for experience criteria as per QR is attached along with Technical Unpriced Bid.

Non-compliance to any of the QR will lead to outright rejection of the bid without any further reference to the bidders.

RMS Communication and Security Architecture- PM KUSUM SEDM Platform

Signature :-
Subject : CN=NIKHIL BHANDARI, ST=DELHI, OID.2.5.4.17=110003, OU=SUPPLY CHAI
N MANAGEMENT, O=ENERGY EFFICIENCY SERVICES LIMITED, C=IN
User ID : nikhil.bhandari
Serial No : 13183FB

Date: 14/07/2020

Contents

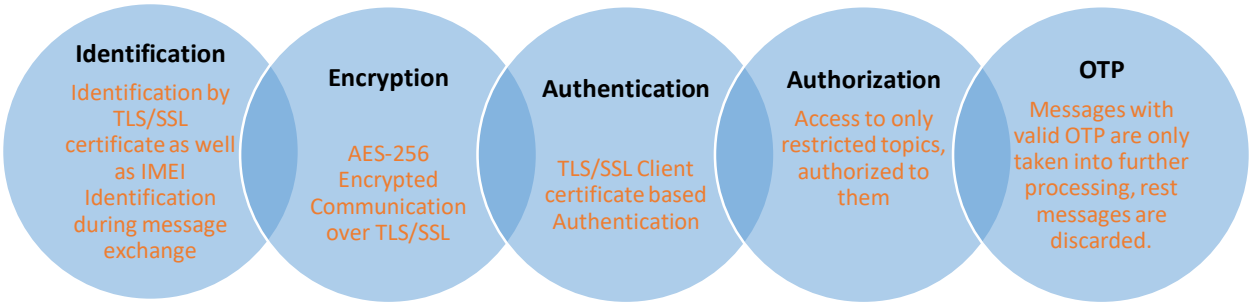
RMS Communication & Security Architecture

1. Security Architecture (with reference to EESL Tender Annexure 8 – clause 4.d)
2. RMS Registration (with reference to EESL Tender Annexure 8 – clause 4.d)
3. MQTT Topic Structure (with reference to EESL Tender Annexure 8 – clause 4.b,4.c)
4. MQTT Message Structure (with reference to EESL Tender Annexure 8 – clause 4.e,4.f)
5. Annexure: JSON Formats with parameter keywords, sample values and description
    a. Annexure: Pump Controller
    b. Annexure: Energy Meter
    c. Annexure: Inverter
    d. Annexure: String Combiner Box (SJB)
    e. Annexure: Heartbeat
    f. Annexure: DAQ

1. Security Architecture

This section highlights the communication security architecture between RMS/DCU and State SWPS IoT Platform. With this security, architecture, third parties are unable to intercept or "sniff" the encrypted data. This stops ISPs, employers, local network administrators and cybercriminals from being able to perform "packet sniffing" to access what the traffic contains. It also protects against man in the middle (MitM) attacks. This implements Private TLS/SSL VPN to ensure highest level of security.

In additional to this, use of OTP in every message exchange shall help restrict spammers and Bots. Such OTP based mechanism will provide transaction level security which is required for remote operations.



2. RMS Registration

This section details how individual RMS/DCU shall be registered and communicate securely with State SWPS IoT Platform.

- Every supplier/vendor must Register all unique IMEI (International Mobile Equipment Identity) of RMS/DCU with State SWPS
- State SWPS will generate individual client certificate for RMS/DCU against unique IMEI registered and share with supplier/vendor through secured web API interface.
- Every supplier/vendor shall be able to access web API with unique credentials shared with them.
- Web API shall return individual client certificate, Device Broker url and "info" topic.
- After installation of client certificate relevant to IMEI of RMS/DCU, RMS/DCU will connect to Device Broker and get authenticated using client certificate and further shall be able to receive additional configuration details such as FTP credential, Message Topic structure etc. after subscribing to default topic.
- After client certificate expiry, RMS will connect to FTP using available credentials and download the renewed certificate

3. MQTT Topic Structure

This section defines the different topic structure for communication between RMS/DCU and State SWPS through Device Broker.

RMS/DCU will publish and subscribe to their respective topics only, authorization of topic shall be done against unique credentials.

Application Version	Solution	IMEI	Message Type	Publish/Subscribe
IIOT-1	Standalonesolarpump	{IMEI}	Info	Subscribe
	Gridconnectedsolarpump		OTP	Subscribe
	SolarMW		Heartbeat	Publish
	Ongridrooftop		Data	Publish
	Offgridrooftop		Ondemand	Subscribe
			Config	Subscribe

Sample Topic structure for Stand-alone Solar Pump shall be: **IIOT-1/Standalonesolarpump/{IMEI}/info**

Multiple sub-topics will be formed for communication between RMS/DCU and sate SWPS IoT Platform

- **Info:** Default Topic To exchange RMS/DCU configuration details
- **OTP:** To exchange OTP at every interval of 15/30/60 minutes
- **Heartbeat:** To update RMS/DCU health indicators at frequent configurable intervals.
- **Data:** To exchange data related to RMS/DCU Monitoring parameters in "**push mode**"
  - Push data Periodically
  - Push data on Event/Notification
  - History Missing Data Push Mode: History data will be identified against **"index"**

- **Ondemand:** To exchange data between RMS/DCU and Server in "**Command on Demand**" Mode
    - Each "On Demand" message will have two transactions: Commands, Response.
    - On demand command and response will be tracked against a common **"MSGID".**
    - On demand message can be used to read and write with two command types
        - Command: **"Read"** - In json received from server replace each key with value from RMS/DCU and send the updated json back to server.
        - Command: **"Write"** - After executing the command based on key-value pair received in json, send the updated json back to server on successful execution.
        - Note: handshaking parameters such as msgid, etc has to send back to server as is, without modification
- **Config:** To update configurable parameters of Device, which is similar to Ondemand but will be used only for configurable parameters of Device, this implements "**Configuration over the air**"
        - Command: **"Read"** - In json received from server replace each key with value from RMS/DCU and send the updated json back to server.
        - Command: **"Write"** - After executing the command based on key-value pair received in json, send the updated json back to server on successful execution.
        - Note: handshaking parameters such as msgid, etc has to send back to server as is, without modification

4. Communication Modes

- **Push on Periodic Interval:** In this mode deployed RMS shall transmit data of Multiple devices and sensors on different configurable time intervals such as Inverter or pump controller data at every 5 minutes, Energy Meter data at every 15 minutes, String Combiner Box data at every 10 minutes
- **Push on Event:** RMS shall detect various configurable alarm or event conditions such as Pump On / Off Status, Inverter On/Off Status, Low Water Flow Rate, Fault or Trip status etc. and It shall transmit data immediately to the server
- **On Demand Read:** In this mode, User will send command to RMS to get data as and when required and RMS will send the required data to server immediately
- **On Demand Write:** In case of Remote Operations, Farmer / Consumer shall send On Demand Write Command to the RMS and RMS will send back the acknowledgement with change in parameters after operation is completed
- **Configuration read/write:** Using this mode, user will be able to read and change configurable parameters remotely such as updating periodic interval, alarm limits, server parameters etc.

5. Communication Protocols

- **Field Device Communication:** RMS to Field Devices communication such as Inverter, Pump Controller, Drive, String Combiner box, MFT/MFM, Data Acquisition System shall be established using **MODBUS RTU protocol** supported by all leading manufacturers globally

- **Energy Meter Communication:** RMS to Energy Meter communication such as Bi Directional (Revenue) Meter, Solar Generation (Audit) Meter shall be established using **DLMS/Modbus protocol** supported by all leading Meter Manufacturers in India
- **RMS to Server Communication - Industrial IoT MQTT Protocol:** RMS to Server Communication shall be established using MQTT protocol which is well accepted IoT protocol across the globe and supported by all leading IT as well as OT companies for Smart Grid, Smart RE and Smart City Applications

6. MQTT Message Structure

This section details message structure exchanged between RMS/DCU and state SWPS IoT Platform through Device Broker

keyword	Description	Sample Value
IMEI	Unique Identification of RMS/DCU – required to ensure registered source of data	863287049443888
VD	Virtual device/group – required for grouping parameters based on update interval/subsystems such as inverter/pump controller/meter/string combiner box etc.	2
MSGID	Message Transaction Id - required for "Ondemand"/"Config" message type, request/response/acknowledgement/feedback	123456789
COMMAND	Read/Write - Applicable only in case of "Ondemand"/"Config" message Type	Read
TIMESTAMP	RTC timestamp of RMS/DCU against all parameters of vd/group (YYYY-MM-DD HH:mm:SS)	2019-08-20 20:15:08
STINTERVAL	Periodic interval at which RMS shall store and transmit data to server. (in minutes)	15
DATE	local storage date – required as a reference to fetch data from local storage (YYYY-MM-DD)	2020-06-15
INDEX	Local storage Index – required as a reference to fetch data from local storage	5
MAXINDEX	Local storage maximum index of local storage date – required to calculate missing index	96
LOAD	Local storage retrieval command & status	0
POTP	Previous One Time Password	12345678
COTP	Current One Time Password, State SWPS Broker will update OTP at interval of 30/60 minutes	12345678
Parameter-1 **Parameter-2** **Parameter-3** **Parameter-1** **……..** **Parameter-n**	Equipment wise Keywords for multiple Parameters.	

Communication Format Annexure

Annexure – 1 (Revision-B) Pump Controller

Message Name	: Periodic Push Pump Controller (1)
Message Format	: JSON
Message Type	: Data
Message Command Flow	: Not Applicable for Data periodic Push
Message response Flow	: RMS -> State SWPS IoT Platform
Message Medium	: GPRS

Command Message	
Not Applicable	

Response Message		
Message	**Description**	**Unit**
{		
"VD":1	Virtual Device Index/Group	-
"TIMESTAMP":"2020-05-18 17:58:00",	RTC timestamp of RMS/DCU against all parameters of vd/group	-
“MAXINDEX”:96	maximum index of local storage date	-
"INDEX":7,	reference of local storage	-
"LOAD":0,	Local storage retrieval command & status	-
"STINTERVAL":15,	Periodic interval at which RMS shall store and transmit data to server. (in minutes)	-
"MSGID":"",	Message Transaction Id - required for “Ondemand”/”Config” message type, request/response/acknowledgement/feedback	-
"DATE":200518,	local storage date	YYMMDD
"IMEI":"1234561234561234",	IMEI No. of First Sim to be considered always for unique identity of DCU	-
"ASN_11":"34123450",	**Pump Controller Serial No.** RMS: 0 DAQ: 1-9 Pump Controller: 11-19 Meter: 21-29 Inverter: 31-39 String Combiner Box: 41-49	**-**
"POTP":"341234",	**Previous One Time Password**	**-**
"COTP":"341234",	**Current One Time Password**	**-**
"PMAXFREQ1":"50.00",	**Maximum Frequency**	**Hz**

"PFREQLSP1":"50.00",	Lower Limit Frequency	Hz
"PFREQHSP1":"50.00",	Upper Limit Frequency	Hz
"PCNTRMODE1":"1", 0 Variable Frequency Control Mode 1 CVT Mode for Solar 2 MPPT mode for Solar	Solar Pump Controller Control Mode Status	-
"PRUNST1":"2", 0 Stop 1 Running 2 Sleep 3 Low Speed Protection 4 Dry Run Protection 5 Over Current Protection 6 Minimum Power Protection	Solar Pump Controller Run Status	-
"PREFFREQ1":"50.00",	Solar Pump Controller Reference Frequency	Hz
"POPFREQ1":"50.00",	Solar Pump Controller Output Frequency	Hz
"POPI1":"20.00",	Output Current	A
"POPV1":"230.00",	Output Voltage	V
"POPKW1":"45.00",	Output Active Power	KW
"PDC1V1":"550.00",	DC Input Voltage	DC V
"PDC1I1":"50.00",	DC Current	DC I
"PDCVOC1":"650.00",	DC Open Circuit Voltage	DC V
"PDKWH1":"35.00",	Today Generated Energy	KWH
"PTOTKWH1":"120.00",	Cumulative Generated Energy	KWH
"POPFLW1":"2.00",	Flow Speed	LPM
"POPDWD1":"120.00",	Daily Water Discharge	Litres
"POPTOTWD1":"220.00",	Total Water Discharge	Litres
"PMAXDCV1":"750.00",	Max DC Voltage	DC V
"PMAXDCI1":"40.00",	Max DC Current	DC I
"PMAXKW1":"650.00",	Max Output Active Power	DC KW
"PMAXFLW1":"650.00",	Max Flow Speed	LPM
"PDHR1":"8.00",	Pump Day Run Hours	Hrs
"PTOTHR1":"8.00",	Pump Cumulative Run Hours	Hrs
}		

Reaction	
Not Applicable	

Signature :-
Subject : CN=NIKHIL BHANDARI, ST=DELHI, OID.2.5.4.17=110003, OU=SUPPLY CHAI
N MANAGEMENT, O=ENERGY EFFICIENCY SERVICES LIMITED, C=IN
User ID : nikhil.bhandari
Serial No : 13183FB

Communication Format Annexure

Annexure - 2 Energy Meter

Message Name	: Periodic Push Meter (1)
Message Format	: JSON
Message Type	: Data
Message Command Flow	: Not Applicable for Data periodic Push
Message response Flow	: RMS -> State SWPS IoT Platform
Message Medium	: GPRS

Command Message	
Not Applicable	

Response Message	
Message	**Description**
{	
"VD":2	Virtual Device Index/Group
"TIMESTAMP":"2020-05-18 17:58:00",	RTC timestamp of RMS/DCU against all parameters of vd/group
“MAXINDEX”:96	maximum index of local storage date
"INDEX":7,	reference of local storage
"LOAD":0,	Local storage retrieval command & status
"STINTERVAL":15,	Periodic interval at which RMS shall store and transmit data to server. (in minutes)
"MSGID":"",	Message Transaction Id - required for “Ondemand”/”Config” message type, request/response/acknowledgement/feedback
"DATE":200518,	local storage date

"IMEI":"1234561234561234",	IMEI No. of First Sim to be considered always for unique identity of DCU
"ASN_21":12345678,	Asset Serial Number RMS: 0 DAQ: 1-9 Pump Controller: 11-19 Meter: 21-29 Inverter: 31-39 String Combiner Box: 41-49
"MTDET1":30012302,	Meter Detail
"POTP":"34123450",	**Previous One Time Password**
"COTP":"34123450",	**Current One Time Password**
"MTBLDATE1":18,	Billing Date for meter 1
"DATE1":180606,	Present date for meter1
"TIME1":105400,	Present time for meter1
"IR1":20.58,	R Phase Current in Amps
"IY1":20.65,	Y Phase Current in Amps
"IB1":20.12,	B Phase Current in Amps
"VRN1":240.12,	R Phase to Neutral Voltage in Volts
"VYN1":242.13,	Y Phase to Neutral Voltage in Volts
"VBN1":243.55,	B Phase to Neutral Voltage in Volts
"VRY1":420.18,	Phase to Phase Voltage(R-Y) in Volts
"VYB1":419.38,	Phase to Phase Voltage(Y-B) in Volts
"VBR1": 421.5,	Phase to Phase Voltage(B-R) in Volts
"PFR1":0.98,	R Phase Power Factor
"PFY1":0.97,	Y Phase Power Factor
"PFB1":0.96,	B Phase Power Factor
"FRQ1":50.05,	Grid Frequency
"POWR1":42.578,	R Phase Active Power in KW
"POWY1":42.156,	Y Phase Active Power in KW
"POWB1":42.354,	B Phase Active Power in KW
"POW1":42.185,	Total Active Power in KW
"RPOWR1":22.123,	R Phase Reactive Power in KVAR
"RPOWY1":20.110,	Y Phase Reactive Power in KVAR
"RPOWB1":22.310,	B Phase Reactive Power in KVAR
"RPOW1":65.610,	Total Reactive Power in KVAR
"APOWR1":55.610,	R Phase Apparent Power in KVA
"APOWY1":52.910,	Y Phase Apparent Power in KVA
"APOWB1":53.911,	B Phase Apparent Power in KVA
"APOW1":14.198,	Total Apparent Power in KVA
"KWHNET1":98561.4,	Cumulative Net Energy in KWH
"KWHIMP1":98561.4,	Cumulative Import Energy in KWH
"KWHEXP1":98561.2,	Cumulative Export Energy in KWH
"KVAHNET1":99100.3,	Cumulative Net Energy in KVAH
"KVAHIMP1":99105.1,	Cumulative Import Energy in KWH
"KVAHEXP1":98999.1,	Cumulative Export Energy in KWH
"MDKWIMP1":100.3,	Rising Demand (Import) in KW
"MDKWEXP1":98.6,	Rising Demand (Export) in KW

"POFF1":1020,	Grid Power Failure in Minutes
"TC1":100,	Total Tamper Counts
"PF1":0.99,	Average PF
"LBKWHNET1":98561,	Last Billing Cycle Net Energy in KWH
"LBKWHIMP1":98561,	Last Billing Cycle Import Energy in KWH
"LBKWHEXP1":98561,	Last Billing Cycle Export Energy in KWH
"PMDKVAIMP1":22.50,	Present MD KVA Import
"PMDKVAEXP1":0.00,	Present MD KVA Import
"LBMDKWIMP1":7.07,	Last Billing MD KW Import
"LBMDKWEXP1":0.00,	Last Billing MD KW Export
"LBMDKVAIMP1":7.07,	Last Billing MD KVA Import
"LBMDKVAEXP1":0.00,	Last Billing MD KVA Export
"MDRSTC1":4	MD Reset Count
}	

Reaction	
Not Applicable	

Communication Format Annexure

Annexure – 3 Inverter

Message Name	: Inverter Periodic Push (INVERTER-1)
Message Format	: JSON
Message Type	: Data
Message Command Flow	: Not Applicable for Data periodic Push
Message response Flow	: RMS -> State SWPS IoT Platform
Message Medium	: GPRS

Command Message	
Not Applicable	

Response Message	
Message	**Description**
{	
"VD":5	Virtual Device Index/Group
"TIMESTAMP":"2020-05-18 17:58:00",	RTC timestamp of RMS/DCU against all parameters of vd/group
“MAXINDEX”:96	maximum index of local storage date
"INDEX":7,	reference of local storage
"LOAD":0,	Local storage retrieval command & status
"STINTERVAL":15,	Periodic interval at which RMS shall store and transmit data to server. (in minutes)
"MSGID":"",	Message Transaction Id - required for “Ondemand”/”Config” message type, request/response/acknowledgement/feedback
"DATE":200518,	local storage date
"IMEI":"1234561234561234",	IMEI No. of First Sim to be considered always for unique identity of DCU
"ASN_31":"34123450",	**Inverter Serial No.**

Signature :
Subject : CN=NIKHIL BHANDARI, ST=DELHI, OID.2.5.4.17=110003, OU=SUPPLY CHAI
N MANAGEMENT, O=ENERGY EFFICIENCY SERVICES LIMITED, C=IN
User ID : nikhil.bhandari
Serial No : 13183FB

	RMS: 0 DAQ: 1-9 Pump Controller: 11-19 Meter: 21-29 Inverter: 31-39 String Combiner Box: 41-49
"POTP":"34123450",	**Previous One Time Password**
"COTP":"34123450",	**Current One Time Password**
"IST1":1,	**Inverter Status**
"IFREQ1":40,	**Frequency**
"IPF1":0.8,	**Power Factor**
"IDC1V1":500,	**DC-1 Voltage**
"IDC1I1":200,	**DC-1 Current**
"IDC1KW1":200,	**DC-1 Power**
"IDC2V1":243.55,	**DC-2 Voltage**
"IDC2I1":420.18,	**DC-2 Current**
"IDC2KW1":200,	**DC-2 Power**
"IDC3V1":419.38,	**DC-3 Voltage**
"IDC3I1":421.8,	**DC-3 Current**
"IDC3KW1":200,	**DC-3 Power**
"IDC4V1":0.98,	**DC-4 Voltage**
"IDC4I1":0.97,	**DC-4 Current**
"IDC4KW1":200,	**DC-4 Power**
"IRPHV1":0.96,	**R phase voltage**
"IRPHI1":50.05,	**R phase current**
"IRPHKW1":50.05,	**R phase Active Power**
"IYPHV1":42.578,	**Y phase voltage**
"IYPHI1":42.156,	**Y phase current**
"IYPHKW1":50.05,	**Y phase Active Power**
"IBPHV1":42.354,	**B phase voltage**
"IBPHI1":42.185,	**B phase current**
"IBPHKW1":50.05,	**B phase Active Power**
"IKW1":22.123,	**Active Power**
"ITKWH1":20.110,	**Today Generated Energy**
"ITON1":22.310,	**Today On Time of Inverter**
"ILKWH1":65.610,	**Life time Generated Energy**
"ILON1":55.610,	**Life time running hours**
"ITEMP1":52.910,	**Inverter Temperature**
"IFT11":53.911,	**Fault-1**
"IFT21":14.198,	**Fault-2**
"IFT31":98561.4,	**Fault-3**
"IFT41":98561.4,	**Fault-4**
"IFT51":98561.2,	**Fault-5**
"IKVA1":99100.3,	**Apparent power**
"IKVAR1":99105.1	**Reactive power**
}	

Reaction	
Not Applicable	

Communication Format Annexure

Annexure - 4 String Combiner Box

Message Name	: Periodic Push String Combiner Box
Message Format	: JSON
Message Type	: Data
Message Command Flow	: Not Applicable for Data periodic Push
Message response Flow	: RMS -> State SWPS IoT Platform
Message Medium	: GPRS

Command Message	
Not Applicable	

Response Message	
Message	**Description**
{	
"VD":9	Virtual Device Index/Group
"TIMESTAMP":"2020-05-18 17:58:00",	RTC timestamp of RMS/DCU against all parameters of vd/group
“MAXINDEX”:96	maximum index of local storage date
"INDEX":7,	reference of local storage
"LOAD":0,	Local storage retrieval command & status
"STINTERVAL":15,	Periodic interval at which RMS shall store and transmit data to server. (in minutes)
"MSGID":"",	Message Transaction Id - required for “Ondemand”/”Config” message type, request/response/acknowledgement/feedback
"DATE":200518,	local storage date
"IMEI":"1234561234561234",	IMEI No. of First Sim to be considered always for unique identity of DCU
"ASN_41":"34123450",	**SJB Serial no** RMS: 0 DAQ: 1-9

	Pump Controller 11-19 Meter 21-29 Inverter 31-39 String Combiner Box 41-49
"POTP":"34123450",	**Previous One Time Password**
"COTP":"34123450",	**Current One Time Password**
"SI11":"3.00",	**SJB1, Channel1 Current**
"SI21":"5.00",	**SJB1, Channel2 Current**
"SI31":"5.00",	**SJB1, Channel3 Current**
"SI41":"5.00",	**SJB1, Channel4 Current**
"SI51":"5.00",	**SJB1, Channel5 Current**
"SI61":"5.00",	**SJB1, Channel6 Current**
"SI71":"5.00",	**SJB1, Channel7 Current**
"SI81":"5.00",	**SJB1, Channel8 Current**
"SI91":"5.00",	**SJB1, Channel9 Current**
"SI101":"5.00",	**SJB1, Channel10 Current**
"SI111":"5.00",	**SJB1, Channel11 Current**
"SI121":"5.00",	**SJB1, Channel12 Current**
"SI131":"5.00",	**SJB1, Channel13 Current**
"SI141":"5.00",	**SJB1, Channel14 Current**
"SI151":"5.00",	**SJB1, Channel15 Current**
"SI161":"5.00",	**SJB1, Channel16 Current**
"SI171":"5.00",	**SJB1, Channel17 Current**
"SI181":"5.00",	**SJB1, Channel18 Current**
"SI191":"5.00",	**SJB1, Channel19 Current**
"SI201":"5.00",	**SJB1, Channel20 Current**
"SI211":"5.00",	**SJB1, Channel21 Current**
"SI221":"5.00",	**SJB1, Channel22 Current**
"SI231":"5.00",	**SJB1, Channel23 Current**
"SI241":"5.00",	**SJB1, Channel24 Current**
"SDCV1":"635.00",	**SJB1, DC Voltage**
"SDCTOTI1":"40.00",	**SJB1, Total DC Current**
"SDCTOTKW1":"28.00",	**SJB1, Total DC Power**
"SDI11":"1.00",	**SJB1, Digital Input1**
"SDI21":"1.00",	**SJB1, Digital Input2**
"ST11":"1.00",	**SJB1, Temperature1**
"ST21":"1.00",	**SJB1, Temperature2**
"ST31":"1.00"	**SJB1, Temperature3**
}	

Reaction	
Not Applicable	

Annexure – 5 RMS

Message Name	: RMS
Message Format	: JSON
Message Type	: Heartbeat
Message Command Flow	: Not Applicable
Message response Flow	: RMS -> State SWPS IoT Platform
Message Medium	: GPRS

Command Message	
Not Applicable	

Response Message	
Message	**Description**
{	
"VD":0	Virtual Device Index/Group
"TIMESTAMP":"2020-05-18 17:58:00",	RTC timestamp of RMS/DCU against all parameters of vd/group
“MAXINDEX”:96	maximum index of local storage date
"INDEX":7,	reference of local storage
"LOAD":0,	Local storage retrieval command & status
"STINTERVAL":15,	Periodic interval at which RMS shall store and transmit data to server. (in minutes)
"MSGID":"",	Message Transaction Id - required for “Ondemand”/”Config” message type, request/response/acknowledgement/feedback
"DATE":200518,	local storage date
"IMEI":"1234561234561234",	IMEI No. of First Sim to be considered always for unique identity of DCU
"POTP":"341234",	**Previous One Time Password**
"COTP":"341234",	**Current One Time Password**
"GSM":1,	Device connected to GSM network
"SIM":1,	SIM detected (1 - detected)
"NET":1,	Device in Network (1 - in network)
"GPRS":"1",	GPRS connected (1 - connected)