Inside Campus potential issues and measures related to Electricity and Water

**Electrical**

1. In campus we have 3 technicians and 1 SO. They are well versed with the electrical systems in the campus.
2. LCS breaker could trip – We know how to get it back. There are 5 LCS in the campus.
3. MRS – breaker could trip – We know how to get it back. There is one MRS in the campus.
4. Underground Cable faults could happen inside and outside campus. There are two independent routes for Cable, so the possibility of both getting faulty is rare. If still, it happens we do not have any resources inside the campus to repair.
5. For emergency we have 5 Nos. of 160 KVA DG set and 2 Nos. of 500 KVA DG sets. They will provide power to Academic Building emergency services and Common area emergency services. There are no DG set connecting to residential areas including hostels. About possibility of current DG set being connected to residential area, we need more time to figure this out. The DG set has provisions to run for 24-hour period. Beyond that we need further diesel supply.
6. There are two transformers in the campus for each LCS (LCS -1 has three). LCS-2 and 3 are connected to residential area. Hence, we feel it is rare that both transformers will go bad.
7. MCCB panels in LCS could go wrong. There are spares which are available. Technicians can change them if required.
8. Terminals could get damaged. They can be repaired using technicians in the campus.
9. If two other people related to electrical work can stay in the campus it will be very useful.
10. Typical costs of diesel for 24 hours (100 liters approx. per hour) is Rs. 168000.

**Water**

1. Two persons (plumbers) are in the campus who can take care partially water related issues.
2. Source of water for campus – both borewells and outside well. There are 7 borewells in the campus which are giving yields.
3. The two plumbers know how to operate the borewells. The outside well is operated by the security guard in contact with our plumbers. The main job is to switch on and off the pump depending on water level of the open well.
4. When Outside well water level is low, pumps could trip. Then we need electrical people to help bring back the system. The electrical technicians inside the campus can help repair.
5. If electricity to outside well gets disrupted, then DG has to be switched on. This can be done by our technicians staying inside the campus. Diesel consumption is around 70 liters per day. One day stock is available.
6. Borewell pumps could also trip. The two plumbers in the campus checks and if there is an issue reports to electrical technicians to repair.

7. Waters from borewell connection first goes to a tank near Admin building. Then pumped to water works. Then it is pumped up to meditation Centre. Outside water directly comes to Water works. If the pumps trip they can be taken care by our technicians in the campus.

8. If pumps get damaged. Borewell pump spares – 2 Nos. The SO-Mechanical and local person (Bigyan Pradhan) can replace. Water work pump – two numbers are there and working alternately, no spares. Admin tank pump – one – No spares. But irrigation pump can be used for this purpose.

9. Distribution of water from Meditation Centre – requires opening and closing valves. There are persons inside the campus to do these things.


11. Two other plumbers willing to come and stay in campus if food and accommodation is provided.

STP

1. Blower has to be switched on.
2. Pump has to be maintained.
3. Water after treatment has to be distributed.
4. Cleaner has to be allowed entry.
5. Every day 3 persons + cleaner will come in shifts. Security has been informed.
6. Chemical needed for treatment of water – only available up to 1st week of April. Needs further clarification.
7. There are 4 filters – whose media changing was taking place. Two filter media not refilled, only two working. Quality of water from STP is poor. Water is used for gardening mainly.

AC

1. Central AC running – one technician and 1 SO available inside campus to run the HVAC plant during general shift – 9:30 AM to 6 PM. So far this facility has been extended to SBS, SPS and Admin.
2. If there is any faults in central AC system that cannot be solved in short time.
3. Repairing split, tower AC and cold room related is not possible.
4. VRF if needed can be made operational.

Fire

1. Fire personnel is not available in campus, AC technicians and SO-Mech can help in case of emergency situation.
2. Security guards are trained to operate the basic systems (like fire extinguishers and fire buckets).
3. Jatni fire services has to be called in case of any emergency.