

## Justification for locating the Project in Forest Area

### Standalone Pumped Storage Component of Pinnapuram-IREP

Since these Pumped storage projects are placed much below the Minimum Draw Down levels because of technical requirement during pumping operations therefore the Main Access Tunnel to Power house becomes very long. With these long MAT and other tunnels, the overall construction time of project was affecting the financial viability of the project adversely.

Keeping this in view, alternative sites were studied for location of Pumped storage project and it was observed that two natural depressions are exist in the adjoining area of Gorakallu Reservoir, where artificial reservoirs can be created in very close vicinity. In this location, both reservoirs were to be constructed a new with low height embankments to create the storage for desired capacity. In this case, this appeared to be the best option technically as in this layout, the total length of water conductor system is minimum, which is the most important requirement for any pumped storage scheme.

All these changes in the layout and capacity have improved the cycle efficiency of the plant which is the most dominant criteria in case of pumped storage projects and impacts the viability of the project directly.

In view of the above, the Reserve forest area is proposed for completion of the project to generate the green power to benefit the State and Country.

Detailed information related to the project is available in the attached Project Report as Annexure-K under additional Information.

