

CIMENTEC Engineering Ltd

Cement Plant process Technologies

Maintenance and repair, dust emission, energy consumption, using alternative fuels, energy savings, electrical power quality, operating equipment efficiency (OEE) are daily issues of concern in our industry. This holds true whether the plant uses the latest available process technology and equipment or it relies on the older generation of equipment and process technology. Some of the likely scenarios would include one or more of the following:

- Equipment stoppage due to frequent overloads or for other reasons
- Increased dust emissions and product accumulation at discharges into silos, elevators and bins or other transfer points
- Kiln available (OEE) below 85%.
- Clinker cooler and crusher capacity are not adequate for the production rates of the plant
- Mill drives and auxiliaries are giving you problems and low availability.
- Stack emissions are not continuously monitored. Permitting for increasing production is an issue.
- GCT requires repair because of rust or other issues.
- Plant needs to replace the duct from the preheater due to rust or fatigue
- Quenched air box in not in good shape and needs to be replaced again.
- Plant is contemplating to replace the ESP. What are the alternatives?
- Emergency power generation and UPS are not adequate and in the event of a power failure the plant experiences a long delay before is back into production.
- Energy consumption in particular the electrical energy portion and billing structure are high
- Electrical power quality issues become a concern and so are the constraints being imposed by the utility

- Plant is penalized by the electrical utility because of low power factor or low load factor.
- Equipment in one side of the plant drops off line when other equipment is started in another part of the plant
- Plan to install a new or to upgrade a variable speed drive on the kiln ID or RM fans or other large B/H fans or other equipment. We may offer an alternative solution.
- Power distribution system is not very reliable and the plant is experiencing frequent outages
- Starting mill drive motors and other equipment adversely affects other user in the power grid.
- Upgrade the plant control system or replacing with a new system.
- Alternative fuels are being contemplated and don't know what to do about emissions or the fuel storage and handling system.
- Power system protection and coordination need to be evaluated to lower the risk of catastrophic failure in the event of electrical equipment fault.
- Experience frequent gear fatigue and like to know the causes
- Experience bearing failures in motors and mechanical equipment and would like to know the causes
- Monitor the vibrations in rotating equipment. We have a simple solution.
- Want to increase production but don't have sufficient power from the electric grid.
- Want to increase the production but need to establish a budget for the required upgrade.

Have you contemplated any of the above scenarios or others issues recently? Now would be best time to talk to our team. We would be glad to discuss any of the above issues and possible solutions at your convenience.