## Report on implementation of SIP:

**Before Implementation:** Ultrasonic type level transmitter was installed in cooling tower basin, clarifier water pond and demi water pond in the plant. Due to the chemical admission in the water of the river Shitallakhya, foam is formed in different tanks. It was found that the Level signal was malfunctioning due to the foam and moisture in closed vessel and subsequent trip signal for steam turbine was generated.

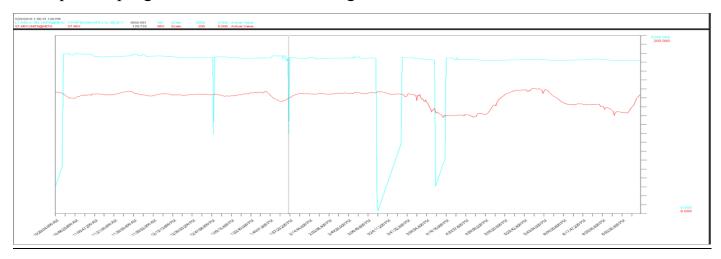


Fig: LT signal malfunction

<u>After Implementation of SIP:</u> gear type level transmitter has been installed on the cooling tower basin. Photos of installation has been shown below:





Fig: Photos of installed gear type level transmitter in cooling tower basin.

And below is shown the trend of transmitted level value from the installed transmitter from 1<sup>st</sup> February 2020 to 4<sup>th</sup> March 7, 2020. It is evident from the trend that there is no sudden up or down spike in value which proves that foam can't cause malfunction in gear type level transmitter. As a result, there had been no incidence of steam turbine trip due to cooling tower level transmitter malfunction.



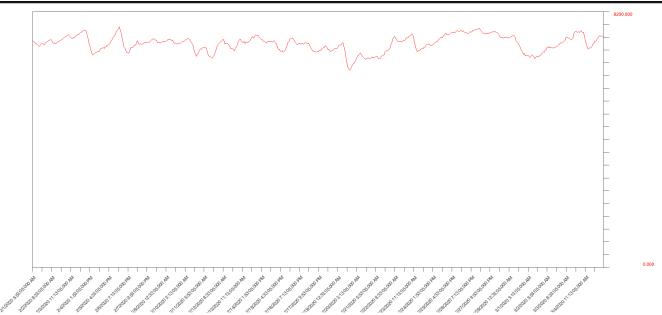


Fig: Trend of cooling tower basin level data from 1st February 2020 to 4th March 7, 2020.