



KERALA STATE ELECTRICITY BOARD LIMITED

(Incorporated under the Companies Act, 1956)

Reg.Office: Vidyuthi Bhavanam, Pattom, Thiruvananthapuram – 695 004

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ABSTRACT

Implementation of indigenously developed Automatic Generation Control (AGC) at SLDC Kerala- Award of Good Service Entry– Sanctioned - Orders issued.

Corporate Office(SBU-T)

B.O.(FTD)No. 391 /2021/D(T&SO)/T4/SO/Appreciation-AGC/21-22 dated Tvpmm 25.05.2021

- Read :
1. Note No. CESO/LD/General/2020-21/402 dated 23.05.2020 of the Chief Engineer(Transmission System Operation).
 2. Note No. D (T&SO) / T4 / SO/ Appreciation- AGC/21-22/10 dated 10.05.2021 of the Director(T&SO) to the Full Time Directors (Agenda : 31/5/21).

ORDER

The Chief Engineer(Transmission System Operation) as per the note read as 1st above reported that Automatic Generation Control (AGC) for Unit #6 at Kuttiady HEP was indigenously developed with the combined effort of the officers from the System Operation wing and Kuttiady Power House. The Chief Engineer provided the details as below:-

- Central Electricity Regulatory Commission (CERC) had issued direction that all thermal ISGS (Inter State Generating Stations) with installed capacity of 200 MW and above and all hydro stations with capacity exceeding 25 MW and whose tariff is determined or adopted by CERC shall install AGC (Automatic Generation Control). All States were directed to do this as a pilot project.
- U#6 (50 MW) of Kuttiady HEP with a Distributed Control System (DCS) was selected for AGC pilot project implementation in Kerala since optical fibre link, one of the pre requisites was readily available at Kuttiady. As per the commercial offer obtained, total cost quoted for implementing AGC was Rs. 1.16 crore. The possibility of designing AGC indigenously with the available SCADA and communication facilities at SLDC and Kuttiady was exploited then.
- As part of implementation of the scheme a dedicated optical fibre channel was established between SLDC and Kakkayam. An AGC server program was developed with Ubuntu server as OS. Server was interfaced with SLDC SCADA for Area Control Error (ACE) and SLDC SEM meters for data interchange. An application program was developed in DCS for interface and control part of AGC. AGC server provides HMI for LD operators for Enable/Disable and Auto/Manual operations apart from display of relevant parameters, real time operation status and feedback from Station DCS. The manual and automatic operation was tested and scheme was put under trial operation with effect from 4.5.2020 for stability monitoring and was successfully commissioned.

The Chief Engineer (Transmission System Operation) reported that the following officers had directly involved in the work and had contributed for successfully developing the AGC mechanism indigenously for the first time in the region/country.

Sl No.	Name & Designation	Role	Office
1	Ajith S, AEE	Design & implementation of IT systems including software development	O/o CE(TSO)
2	Baburaj C N, AEE	SCADA integration with AGC servers and associated communication systems	SCADA SD, Vellathooval (earlier SCADA SD Kalamassery)
3	Dixon TC, AEE	Fiber optic communication systems integration with SCADA/DCS	Communication SD, Kalamassery (earlier TNMS SD, Kalamassery)
4	Sureshkumar A, AEE	AGC system overall regulatory requirements identification, specification coordination and interface management and project coordination	O/o CE(TSO)
5	Jose Thomas, AE	Integration of DCS system at Kuttiady with communication system and remote AGC servers at SLDC	Kakkayam SCADA G&E Maintenance SD
6	Abhilash E L, AE	Fiber optic communication systems integration with SCADA/DCS	TNMS SD, Kalamassery
7	Ratheesh A, AE	SCADA integration with AGC servers and associated communication systems	SCADA SD, Kalamassery

The Chief Engineer (Transmission System Operation) recommended " Good Service " entry in the service records of the above officers as a token of appreciation for the roles played by them and to keep them motivated.

The matter was placed before Full Time Directors as per note read as 2nd above.

Having considered the above, the Full Time Directors, in the meeting held on 17.05.2021 resolved to award Good Service Entry to the following officers, as a token of appreciation for successfully developing Automatic Generation Control (AGC) indigenously, thus making Kerala, the first State

to have completed AGC at regional/national level with indigenous solutions.

Sl. No.	Employee code	Name	Designation
1	1058743	Ajith S	Assistant Executive Engineer(Ele)
2	1047424	Baburaj C N	Assistant Executive Engineer(Ele)
3	1058209	Dixon T C	Assistant Executive Engineer(Ele)
4	1045563	Sureshkumar A	Assistant Executive Engineer(Ele)
5	1064503	Jose Thomas	Assistant Engineer(Ele)
6	1068150	Abhilash E L	Assistant Engineer(Ele)
7	1064768	Ratheesh A	Assistant Engineer(Ele)

Orders are issued accordingly.

By Order of the Full Time Directors
Sd/-
Lekha G.
Company Secretary (In- Charge)

To :

The Chief Engineer (TSO)
The Chief Engineer, HRM
Sri. Ajith S, AEE, O/o Chief Engineer (TSO)
Sri. Baburaj C N, AEE, SCADA SD, Vellathooval
Sri. Dixon T C, AEE, Communication SD, Kalamassery
Sri. Sureshkumar A, AEE, O/o Chief Engineer (TSO)
Sri. Jose Thomas, AE, Kakkayam SCADA G&E Maintenance SD
Sri. Abhilash E L, AE, TNMS SD, Kalamassery
Sri. Ratheesh A, AE, SCADA SD, Kalamassery

Copy to:

The Deputy Chief Engineer(IT)
The Financial Adviser/ The Chief Internal Auditor.
The RAO/ RAO.
The TA to Chairman & MD/ D(T&SO)/ D(D, IT&HRM)/ D(G-C)/ D(G-E& SCM)
The PA to Director (Finance)/CA to Company Secretary
Fair Copy Superintendent/Library/Stock File.

Forwarded / By Order



Assistant Executive Engineer