

The Vast HVDC Experiences of Tommy Hjort

Tommy has a unique set of experiences in the HVDC field, maybe rivaled by none, through full-time execution of projects on the supplier side (ASEA/ABB) for 13 years and on the client side (Statnett/(Energinet+TenneT)) for 5 years. The experiences are on both LCC (Line Commutation Converter) 6 ea projects and VSC (Voltage Source Converter) 3 ea projects thus knowledge of the many specifics of both technologies. Tommy has worked in different capacities at ASEA/ABB as employee; installation supervision, commissioning, plant engineering, technical project management, to some extent system engineering, liaison engineering, tendering etc. At Statnett, as hired consultant, he has been mainly involved in plant engineering involving review of various study and engineering reports, a very large number drawings (electrical, electro-mechanical and civil), active and early incorporation of HSEQ aspects in station design like e. g. constructability, maintainability, designs to implement feasible environmental and quality aspects as well as transferring knowledge to younger colleagues etc. Statnett has praised Tommy's ability to apply constructive holistic views to engineering.

Also at the local utility in Ludvika employed for 21 years, almost entirely in hydropower, he gained experience valuable also in the HVDC field involving refurbishment (total or partly) of smaller (<10 MW) power plants and smaller dams; technical planning, feasibility studies, project engineering, scheduling, specification, project management, commissioning etc.

Some professional highlights:

Tendering

As hired consultant he helped ABB HVDC during 1.5 years to optimize tender designs for Rio Madeira Back-to-Back, Rio Madeira Bipole 1, Rio Madeira Bipole 2, Inga Kolwezi Refurbishment and IPP Upgrade. Four (4) of those tenders turned into orders. As hired consultant he helped Toshiba T & D with tender optimizing to win order for Monita. Although by no means solely responsible, he hence contributed to making 5 out of 6 tenders for EPC contracts turn into orders for large converter stations, thus a good track record.

Project handling

As technical manager (today: lead engineer) at ASEA for Highgate Converter Station (EPC contract) he was the driving force in completing the project in the required time of 17 months. Neither before nor after has such a project been executed in less than 24 months. The profit margin in tender of 10 % was during execution of the project increased to 14 % by the time of handing over the facilities to the client.

As responsible executor at the local utility, VB Energi (VB Kraft, VB Elnät), in Ludvika, several projects were performed from birth to fruition, all on time and within budget, and having performance either meeting or more often exceeding stringent criteria.