SVENSKT VATTENKRAFTCENTRUM

HydroFlex

HydroFlex & SVC workshop

Increasing the value of hydropower through increased flexibility

October 22, 2020
Ångströmlaboratoriet, Lägerhyddsvägen 1, Uppsala, Sweden

Preliminary Agenda

WHEN	WHAT	WHO
09.30	COFFEE AND REGISTRATION	
10.00	Welcome and brief introduction to HydroFlex	Ole Gunnar Dahlhaug, NTNU
10.15	**Future flexibility requirements** Introduction to HydroFlex WP2 Hydropower as flexibility provider for Europe's future energy markets Highly flexible water turbines – Essential solution to future stability challenges?	 Marius Siemonsmeier, RWTH Marius Siemonsmeier, RWTH Maik Schönefeld, RWTH
11.00	**Flexibility of turbines** Introduction to HydroFlex WP3 Adjustable guide vanes in hydraulic turbine draft tube: A concept to control pressure pulsations A tool for hydraulic and mechanical design of guide vanes system	 Igor Iliev, NTNU Jesline Joy, LTU Marija Lazarevikj, UKIM
12.00	LUNCH	
13.00	**Flexibility of the generator and converter** Introduction to HydroFlex WP4 Provision of ancillary services using converter-connected hydropower Modulation techniques for multilevel converter	 Urban Lundin, UU Max Parker, UoS Chengjun Tang, Chalmers

14.00	**Environmental impacts and their mitigation** Introduction to HydroFlex WP5 Numerical modelling of discharge fluctuation mitigation measure for optimizing hydro power plant operations Modelling the effect of hydropower regulation on the salmon production in the River Nidelva	 Staffan Lundström, LTU Omid Saberi, NTNU Richard Hedger, NINA
15.00	COFFEE	
15.15	**Nordic/Swedish hydropower in the future European energy system: A panel discussion**	S Karlsson, Swedish Energy Agency J Bladh, Swedenergy F Engström, Vattenfall B Børresen, Multiconsult
15.55	Closing remarks	Ole Gunnar Dahlhaug, NTNU
16.00	**Tour of Ångströmlaboratoriet**	
17.00	End of workshop	