Reference statements
of Swiss HV Grid Coordinator ETRANS
on system performance of ABB PSSGuard – WAMS

1.) The concept of the ABB PMUs RES521 is very user-friendly. It is easy to set the parameters from remote using our central PSSGuard workplace in Laufenburg. This means low installation costs, especially when it comes to extensions. Additionally, the accuracy of the frequency measurement is with 1 mHz 10 times higher as indicated in the product specification.

Using ABB's PSSGuard system we can better and faster trace the dynamic changes in the Swiss high voltage transmission grid. This is of utmost importance, as grid operators win time to take the right decisions under critical operating conditions.

Dr. Walter Sattinger,
Project Manager PSSGuard WAMS Introduction
ETRANS / Swiss Grid Coordinator

2.) The results of the Line Thermal Monitoring provide additional accuracy in determining the mean current line temperatures if PMUs are installed on both ends of a line. This opens interesting new possibilities to verify the average line temperature during operation.

Mr. George Bossert
Head of Dispatching
ETRANS / Swiss Grid Coordinator

3.) The ABB PSSGuard Phase Angle Monitoring module supervises the loading of the Swiss transmission corridor to Italy. There is a direct correlation between the voltage phase angle and the transmitted power. The voltage phase angle difference between the northern and the southern border of Switzerland reflects directly the loading of the corridor. Therefore it provides an useful additional information for our operators as well as for the protection engineers.

Dr. Walter Sattinger,
Project Manager PSSGuard WAMS Introduction
ETRANS / Swiss Grid Coordinator