The increasing penetration of wind power brings significant challenges to power system operators due to the wind's inherent uncertainty and variability. Traditionally, power plants and more recently demand response have been used to balance the power system. However, the use of wind power as a balancing-power source has also been investigated, especially for wind power dominated power systems such as Denmark. The main drawback is that wind power must be curtailed by setting a lower operating point, in order to offer upward regulation. We propose a statistical approach to reduce wind power curtailment for aggregated wind power plants providing secondary frequency control (SFC) to the power system. By using historical SFC signals and wind speed data, we calculate metrics for the reserve provision error as a function of the scheduled wind power. We show that wind curtailment can be significantly reduced compared to a robust and conservative scheduling, by appropriately choosing a higher operating point based on the error's expected value and the service error requirement.