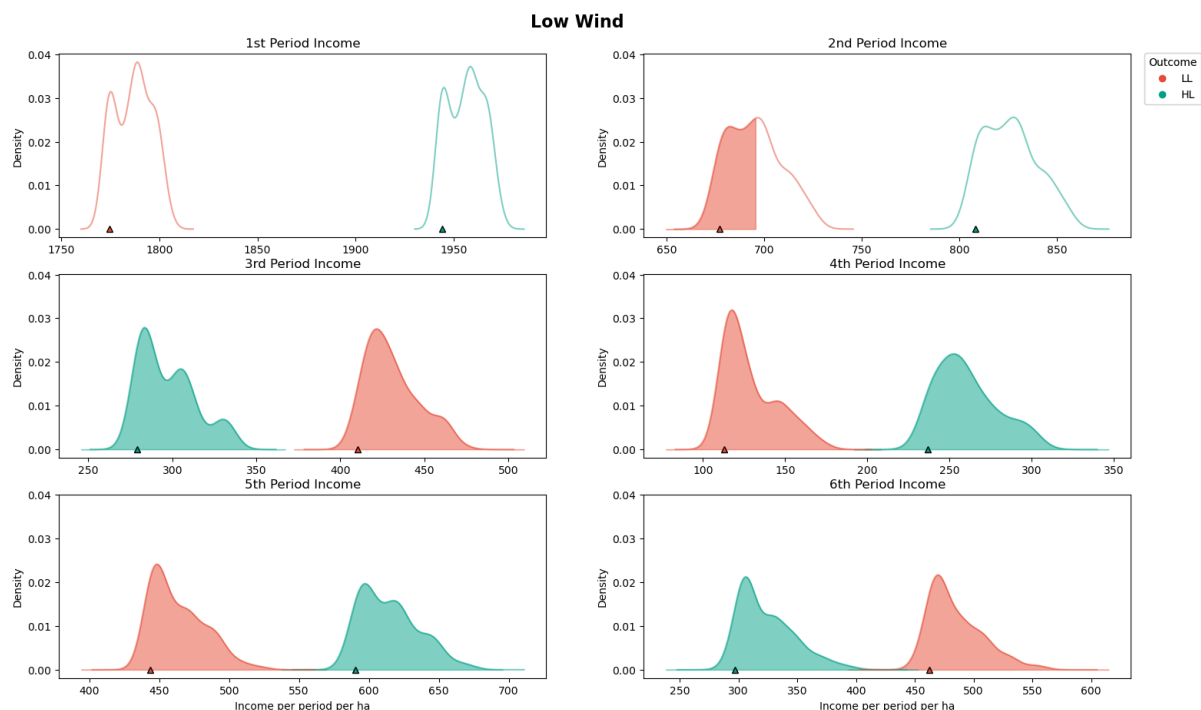**Supplementary file S4**: Periodic income figure when maximizing expected net present value (E(NPV)) and low wind occurs.

The period incomes for the case when maximizing expected net present value (E(NPV)) (Case 1) when low intensity and frequency wind scenarios set occurs (LL). The solid red lines (LL) present the periodic incomes when planning for the low intensity low frequency (LL) wind scenarios. The solid green lines (HL) present the periodic incomes when planning for the high intensity low frequency (HL) wind scenarios. The shaded area of the graph indicates when the targeted income value has not been met, with the symbol at the x-axis corresponds to the conditional value at risk (CvaR) value.