Time Limited Charging

Impact of Charging Underperformance

Relevant Facts:

1. Range of the Car (lived experience). Please understand that these are approximations but based upon about 18 months of use and a full charge
   - Low (Winter): 350 kms
   - High (Late Spring and Early Fall): 520 kms
   - Mid (Rest of year): 450 kms

2. Time to Full Charge 0-100% (Porsche quotes this)
   - @ 11 kWs: 11 hours
   - @ 9.6 kWs: 13 hours

3. Range added Per Hour of Charge: 11kWs vs 9.6 kWs. This is just applying the math of my experienced range to the Porsche quoted time to charge a full charge.

Note from my experience the car charges consistently throughout the charging cycle drawing 9.6 kWs from the charger, except at the very beginning of the process and near the end of the charging process.

- Low (Winter) 32 kms vs 27 kms (i.e., ***5 kms per hour less***)
- High (Late Spring and Early Fall) 47 kms vs 40 kms (i.e., ***7 kms less per hour***)
- Mid (Rest of Year) 41 kms vs 35 kms (i.e., ***6 kms less per hour***)

Analysis:

The higher capacity charging is really about maximizing flexibility, particularly when the need to charge is not predictable or anticipated. As a practical matter, only one of our two vehicles can be charged overnight, unless I get up in the middle of the night to switch car charging.

As a result, I am charging one vehicle during the day when required.

So, for example, for a 5 hour charging window, I have between 25 and 35 kms less range as a result of the failure of the car to charge according to specifications.

That differential can be real and meaningful.