

TO: Teams Manufacturers

CATEGORY: Hypercar LMP2 LMGTE Pro LMGTE Am

DECISION N°: WEC_2022_D0018_Hypercar_Refuelling

DATE: 15/03/2022 **FROM:** The WEC Committee

SUBJECT: Hypercar refuelling

APPLICABLE REGULATION

- 2022 Le Mans Hypercar Technical Regulations

DECISION

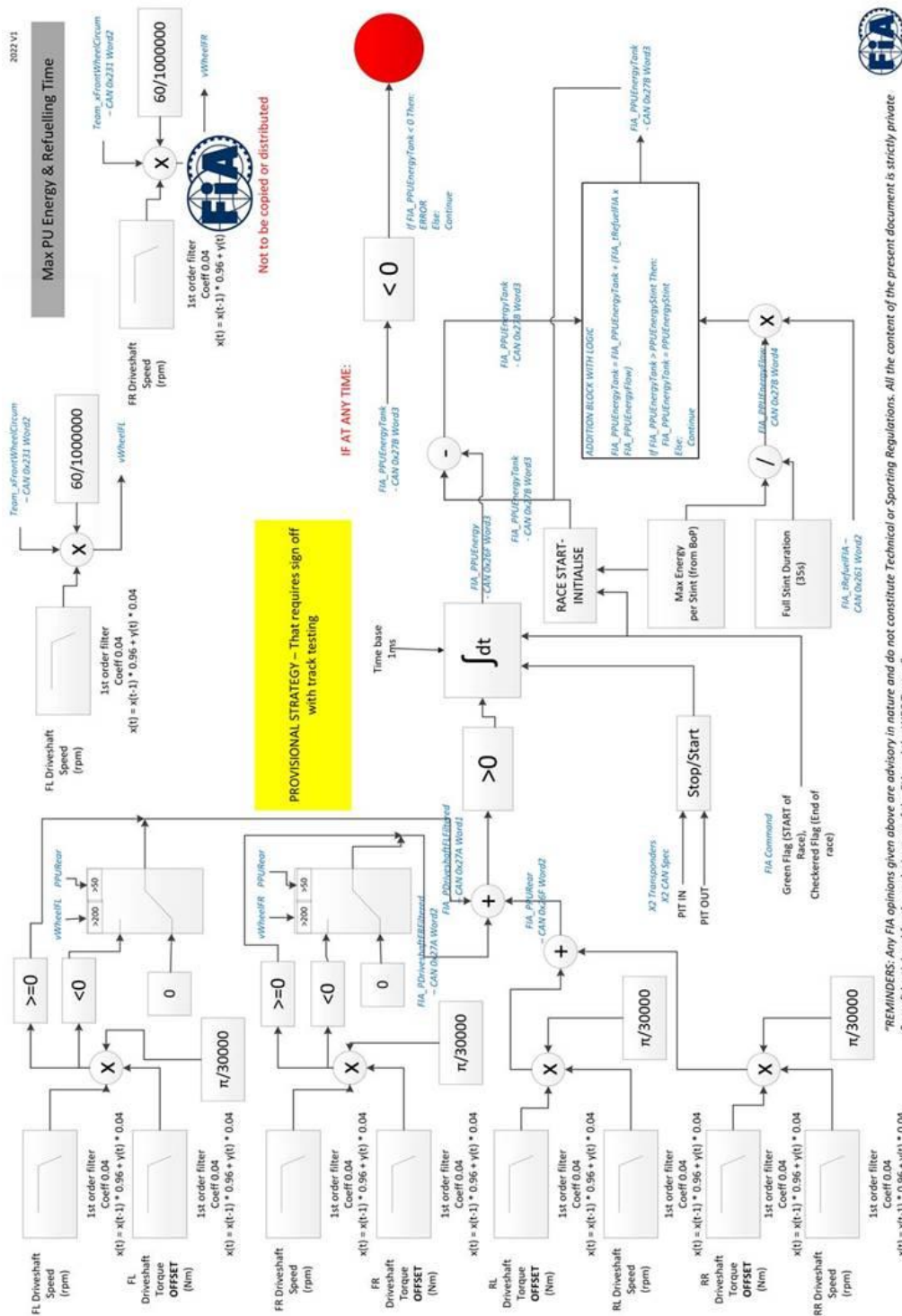
- 1- During the race, the maximum cumulative deployed energy per stint (PPUEnergyStint) must be lower than the value described in the BOP table. The oversight will be based on the principle of a virtual energy tank store represented as PPUEnergyTank in the strategy.
- 2- The energy consumption will be calculated from the integral of the driveshaft torque sensors.
- 3- That energy will be considered from pit-out to pit-in.
For the first stint, the energy will count from the start-finish line at the start of the race (PPUEnergyTank = PPUEnergyStint).
For last stint, the energy calculation will stop at on the finish line at the chequered flag.
- 4- If PPUEnergyTank drops below 0 a penalty will need to be taken at the next pitstop.
- 5- When the refueling hose is connected PPUEnergyTank will increase by the rate defined by PPUEnergyFlow in MJ/s which corresponds to PPUEnergyStint/35s.

Once PPUEnergyTank has reached PPUEnergyStint the increase will stop

- 6- When the PPUEnergyTank goes negative the rate at which this channel reduces will be increased based on the following (acting as a penalty):
 - a. During the race:
$$\text{PPUEnergyTank, MJ} = (4 \times \text{PPUEnergyDeficit, MJ}) + (30, \text{s} \times \text{PPUEnergyFlow, MJ/s})$$
$$\text{PPUEnergyTankPen, s} = ((4 \times \text{abs}(\text{PPUEnergyDeficit, MJ})) / \text{PPUEnergyFlow, MJ/s}) + 30, \text{ s}$$
 - b. At the end of the race:
$$\text{PPUEnergyTankPen, s} = ((4 \times \text{abs}(\text{PPUEnergyDeficit, MJ})) / \text{PPUEnergyFlow, MJ/s}) + 60, \text{ s}$$

PPUEnergyDeficit is defined as the value of PPUEnergyTank when below 0.

- 7- It is the Competitor's responsibility to ensure that the sensor's signal is correct. Any failure to do so will result in an immediate obligation to fix the problem. Any power cycle done during refuelling will result in a not compliant refuelling time.



PERIOD OF VALIDITY/APPLICATION OF THE DECISION

This decision comes into effect:

- with immediate application
- from:

And is applicable:

- until further notice
- for the mentioned Competition(s) only

Any decision taken by the WEC Committee is not subject to appeal.

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