



DISTRIBUCE

A-CH-CZ WEBINAR

12.01.2021

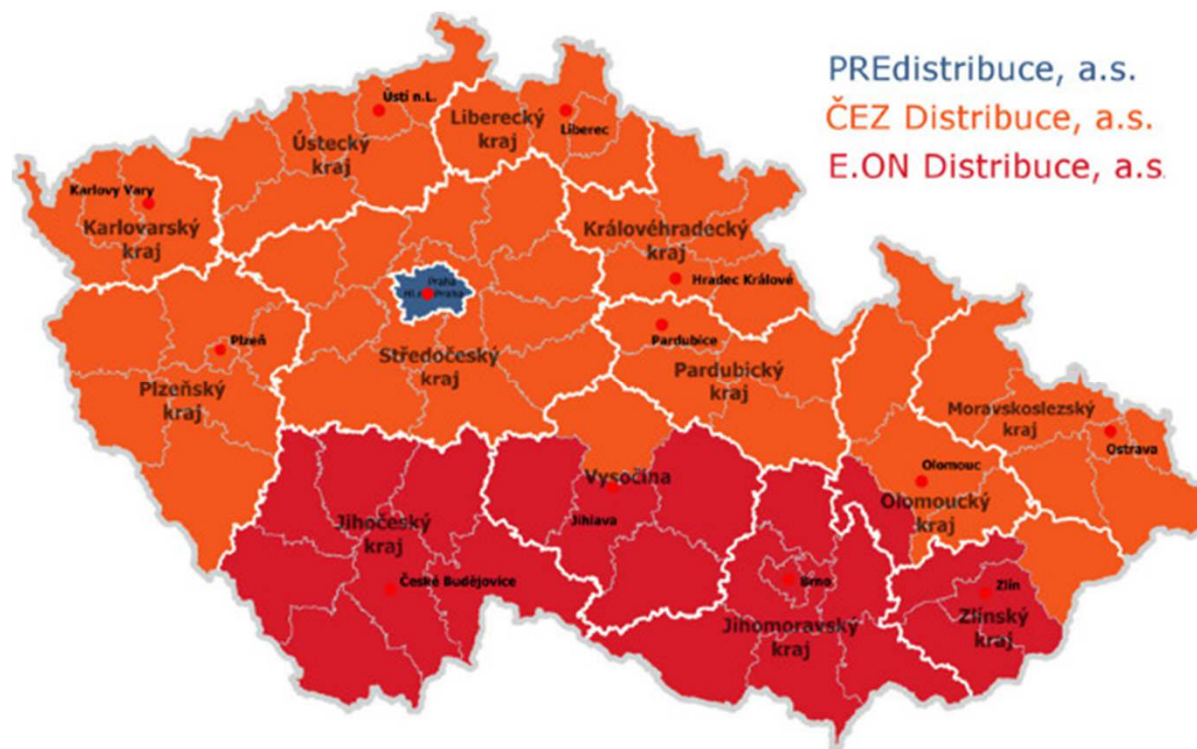
**Ing. Stanislav Hes
CEZ Distribuce (CZ)**

CZECH REPUBLIC 2021

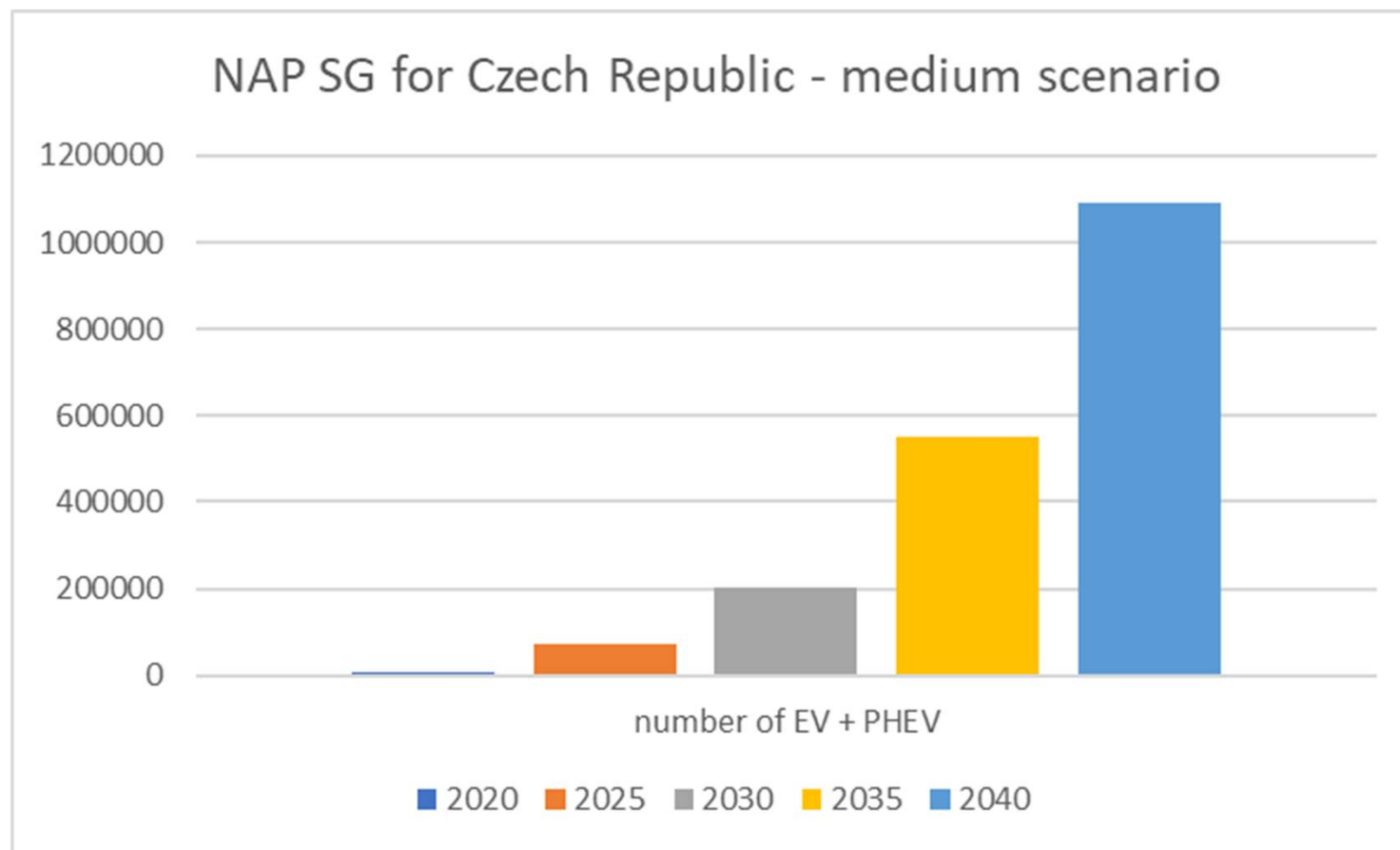
3 DSO's (ripple control in operation)

10,7 Mio Inhabitants

6 Mio Passenger Cars

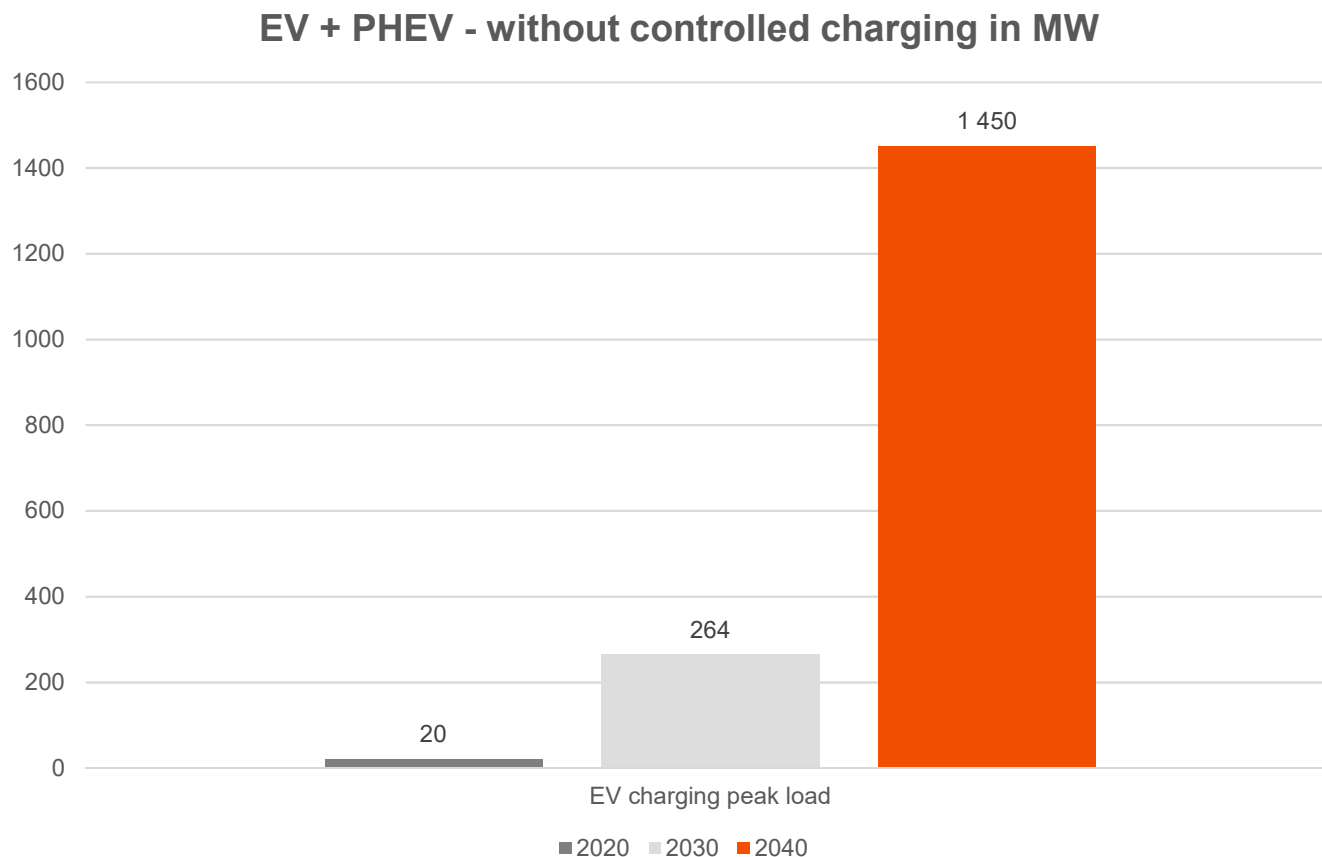


EXPECTED NUMBERS OF EV+ PHEV FOR CZECH REPUBLIC



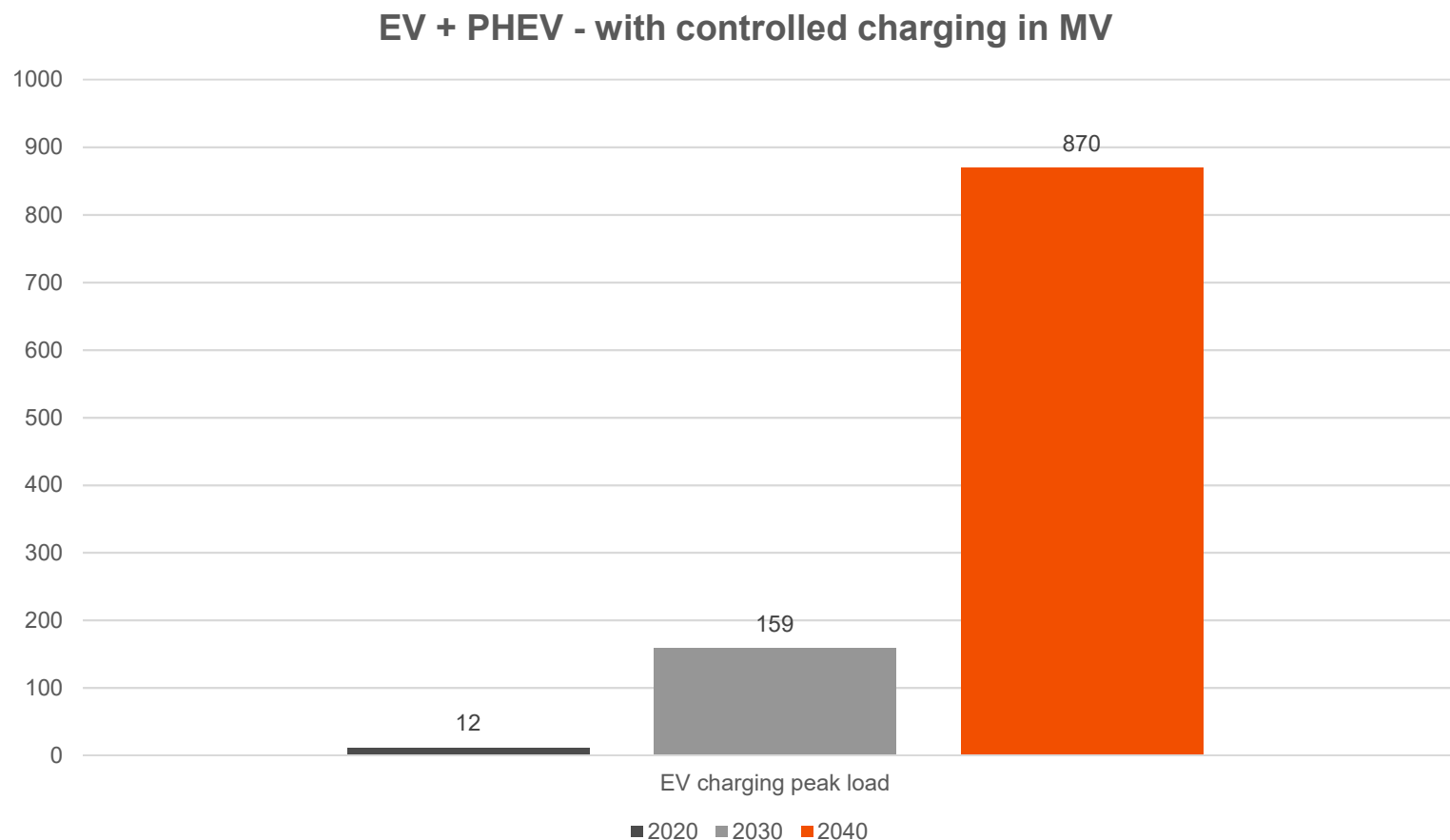
- NAP SG = National Action Plan for Smart Grids (Ministry of Industry and Trade)

EXPECTED IMPACT OF EV+PHEV UNCONTROLLED CHARGING



Increased peak load in CEZ Distribuce areas in Czech Republic

EXPECTED IMPACT OF EV+PHEV CONTROLLED CHARGING MANAGED BY DSO (FOR LV CUSTOMERS)



Increased peak load in CEZ Distribuce areas in Czech Republic

KEY MESSAGES

- Increased number of EVs and PHEVs will significantly increase load peaks in distribution and transmission systems
- Controll of charging times for EVs and PHEVs by DSOs will mitigate the risk of emergency situations and also the needed level of grid expansion (which is payed by customers as regulated cost for electricity)
- Expected approach with DSO-switched dry contact is similar to what CZ already uses at LV grids for electric heating, water boilers and heat pumps within the existing regulatory framework, where loads are controlled via ripple control system (on-peak and off-peak distribution tariffs with DSO direct control of the load)
- Related grid code and regulatory framework updates are expected in 2021