

FOR SDG&E'S MANAGED CHARGING REVIEW

CHARGING LOAD YOU CAN COUNT ON

Earlier demand-response and time-of-use programs depended on customers choosing to change when they charged. Active managed charging works differently, it manages charging load directly and automatically, without asking the driver to change their routine.

THE SIX STAGES OF MANAGED CHARGING

SDG&E's pilot runs at Stage 2



↑ Earlier behavioral and time-of-use programs operate at Stages 0–1. SDG&E's pilot operates at **Stage 2, Smart Active.**

WHERE EARLIER APPROACHES FELL SHORT

- Behavioral and simple time-of-use programs are voluntary and rely on sustained customer effort, so participation and load impact can be inconsistent.
- A simple time-of-use rate can also concentrate demand, with many EVs beginning to charge the moment a lower-priced window opens. That can place more strain on local transformers than leaving charging unmanaged.

WHAT STAGE 2 INVOLVES

- Every charging session is dispatched against grid, price, and carbon signals, and **recalculated every 30 minutes.**
- **Around 80% compliance**, with **no snap-back rebound** when an event ends.
- **Settlement-grade** off-peak compliance, session by session.
- **Automatic**, most vehicles respond to a signal in **under 60 seconds**, with no change asked of the driver. (EVs are typically plugged in about 14 hours a day but need only around 3 hours of charging, a wide, flexible window.)

IN CALIFORNIA TODAY

95%

reduction in peak-period charging load.

90%

of charging shifted to low-carbon midday hours.

SOURCES 95% peak-period load reduction, ev.energy with Recurve and MCE. · 90% shifted to low-carbon midday hours, ev.energy with Silicon Valley Clean Energy.