



CalFlexHub Affiliate Price & GHG Testing Technical Details

The CEC provides the MIDAS server and API as a source for all time-varying retail electricity tariffs in California. MIDAS also provides the SGIP data signal, which is expressed in units of marginal carbon emissions.

CalFlexHub has uploaded its current versions of seasonal prototype research price profiles to the MIDAS server, which are now available for the Affiliate participants to access through the MIDAS API. MIDAS documentation includes sample code for MIDAS server integration and is available [here](#). CFH price profiles are documented in the [Price & GHG Signal Profiles for CalFlexHub Affiliate document](#). The CFH price profiles can be accessed from MIDAS using their unique rate identification numbers (RINs). The RINs for each CFH price profile are in Table 1.

Table 1: CFH price profile RINs

Rate Name	RIN	Description
SpringHDP	USCA-CFCF-SPDP-0000	Spring highly dynamic price signal
SpringGHG	USCA-CFCF-SPDG-0000	Spring marginal emissions signal
SummerHDP	USCA-CFCF-SHDP-0000	Summer highly dynamic price signal
SummerGHG	USCA-CFCF-SUDG-0000	Summer marginal emissions signal
FallHDP	USCA-CFCF-FLDP-0000	Fall highly dynamic price signal
FallGHG	USCA-CFCF-FLDG-0000	Fall marginal emissions signal
WinterHDP	USCA-CFCF-WIDP-0000	Winter highly dynamic price signal
WinterGHG	USCA-CFCF-WIDG-0000	Winter marginal emissions signal

As an optional resource, LBNL has created sample python code for integrating DER devices with the MIDAS server. The LBNL python repository retrieves price forecasts from MIDAS and further adds functionality to convert the price forecasts into python DataFrames and tools to visualize these forecasts. The code is available [here](#).

Disclaimer: Please note that LBNL will not be held liable for any issues connected to the use of the CalFlexHub price server signal or the MIDAS server. It is the responsibility of the users to obtain any permissions required by federal, state, or local law; which may or may not include Institutional Review Board (IRB) review to protect human subjects in research projects.

Contacts

CEC MIDAS technical support: midas@energy.ca.gov (Please don't hesitate to reach out to CEC staff with any issues, assistance requests, or successes. Feedback is welcome!)

LBNL: CalFlexHubAffiliatePgm@lbl.gov (Contact LBNL for interest in becoming an CFH Affiliate, questions about signal content, and any other questions besides MIDAS technical support)