CPUC Comments on SWSV013-01 Duct Optimization, DMo ~~Residential~~

Lead PA: PGE

Workpaper Submittal Date: 12/24/20

CPUC Review Date: 02/04/21

Please note responses to comments in the table below, revise workpaper, and upload the entire package to the WPA. If needed, please reach out to Deemed Review Team to set up a call to discuss.

|  |  |
| --- | --- |
| CPUC Comment | PA Response |
| On page 2 fix “Error! Reference source not found.” | Agreed, Fixed error |
| Change the MAT to BW, page 4. With a MAT of BRO the EUL cannot be longer than 3 years. Refer to [2022 DEER Resolution Scoping Memo](https://pda.energydataweb.com/api/view/2372/DEER2022%20Scoping%20Memo%20FINAL.pdf) for more background and potential changes to duct sealing. The 2022 DEER Update Resolution is expected to be voted out on August 27,2020. | Agreed, Changed MAT to BW |
| Disallow flexible ducts for both the return retrofit and the crossover duct retrofit, page 5. Since these ducts are being installed in crawlspaces under mobile homes, there are concerns around rodent damage which was found as a cause for duct leakage in PG&E’s 9th year retention study. Installing metal ductwork allays these concerns. | Installed ducts shall be made from either galvanized steel, tinplated steel, or aluminum, or shall be listed as Class 0 or Class 1 air ducts under Underwriters' Laboratories, Inc. Standard for Air Ducts, UL181-1972. |
| Recommend adding a data collection item to inform PG&E’s investigation stated on page 6 “PG&E plans to investigate the 50% MIN-OUTSIDE-AIR assumption through implementation of this measure and may propose a future revision based on any significant findings.” The data collection item could be to measure the pressure of the crawlspace with respect to the outside when the house is pressurized to 50 pascals with respect to outside. The assumption of 50% is consistent with a crawlspace measured at 25 pascals when the house is pressurized to 50 Pa. | PG&E believes the measure as the 50% MIN-OUTSIDE-AIR is acceptable and will not collect program data. |
| Change EUL from 15 years to 18 years for consistency with a BW MAT. Please update the EUL references by adding PGE and SCE 9th year retention studies and the LBNL laboratory study referenced in the [2022 DEER Resolution Scoping Memo](https://pda.energydataweb.com/api/view/2372/DEER2022%20Scoping%20Memo%20FINAL.pdf). We have added a new EUL ID = HV-DuctOpt which can be referenced. | Changed EUL ID to HV-DuctOpt-BW (18 years) and added reference. |
| CA T-24 requires minimum duct insulation at R-6.0 in most climate zones and R-8.0 in zones 11 and 14-16. Please revise minimum R value for both the supply and return replacement ducts. | Since this measure is only for DMo buildings, Title 24 is not applicable. However, Title 25 and the following Federal Code is applicable:  § 3280.715 requires an ≥R-4.0 for return ducts and crossovers. However, when exposed to outside air the ducts are required to have a ≥R-8.0. This should not be the case with return ducts but may be the case for the crossover ducts. We have added this clarification for the crossover duct measure. |
| Does the measure installation cost include the labor to test the duct leakage as required in the workpaper? If not, it should be added. | Yes, the costs included duct testing.  We have clarified this in the workpaper. |
| The residential duct sealing NTGRs were updated to 95% in Resolution E-5082 based on the most recent Impact Evaluation Report HVAC Sector – Program Year 2018. Please update NTGR accordingly. (Also make this update for the duct seal measure.) | This workpaper is for PY 2021.  The NTG Res-sAll-mHVAC-DuctSeal (0.95) has a start of 2022.  We will continue to use current NTG of All-Default<=2yrs (0.7) for version 1.0 |
| Update the GSIA to the default value of 1.0 using GSIA ID “Def-GSIA”. This is supported by duct sealing being a direct install measure with expected installation rate of 1.0. The default GSIA is supported by the recent 2018 HVAC EM&V Report that found GRR=95%. The evaluation methodology was billing analysis which captures installation rate and realization rate in the GRR value. | We have updated GSIA to “Def-GSIA” in the workpaper document, EAD, and MeasureDataSpec based on this comment. |