Measures were developed for the DEER 2017 June Update for variable refrigerant flow (VRF) systems based on the Ex Ante measure development that was posted to the Ex Ante database on March 1, 2017. The new development includes expansion to additional building types and restructuring of measures to be based on system capacity. In addition the following minor corrections were made to the models:

* Change rated indoor coil refrigerant temperature from 43°F to 45°F to make sizing of indoor coil more consistent with other HVAC types in DEER.
* Fix bug in DOE2.3 simulation tool that was causing VRF pipes to be oversized in some situations.
* For small office prototype with heat pump VRF, the location of the leader pipe in the VRF system was changed from the plenum zone to be outdoors.
* For the primary school prototype with heat pump VRF, the minimum outdoor air in the model was changed to match the exhaust air flow.
* For the hotel prototype, the plenum configuration was changed from multiple zones per plenum to one plenum per zone.

This archive contains documentation from both the original March 2017 VRF assessment and the new DEER measure development, as described below:

* MeasureImpactsReport folder: Summary of measures that were evaluated in the March 2017 VRF Assessment. Includes results tables and charts.
* PerformanceAssessmentReport folder: Comprehensive description of prototype development and modeling methods used in the March 2017 VRF Assessment.
* DEER2017update folder: Supporting files for the current DEER update showing development of model parameters.
* VRF\_Modeling\_Tools\_2017\_07\_10.zip file: Complete package of tools and files used for the VRF measure simulations.