Requested Changes to Grid package classes associated with ACLineSegment modeling

08 February, 2024

Changes to UML classes, attributes, and associations

Grid Package (former 61970) changes

(Re)Add attribute PhaseImpedanceData.fromPhase

(Re)Add attribute PhaseImpedanceData.toPhase

## PhaseImpedanceData

Class in package 'Wires'

Was: Per length phase impedance matrix entry describes impedance and conductance matrix element values for a specific row and column of the matrix.

The phases to which each entry applies can be determined by means of the row and column attributes which bind to a sequence number provided in either ACLineSegmentPhase or WirePosition (which also specify phase). Due to physical symmetry that is reflected in the matrix, only the lower triangle of the matrix is populated with the row and column method. That is, the column attribute is always less than or equal to the row attribute.

Requested: Per length phase impedance matrix entry describes impedance and conductance matrix element values with either a (row, column) or a (fromPhase, toPhase) pair. If using a (row, column) pair, the phases to which each entry applies can be determined by means of the row and column attributes which bind to a sequence number provided in either ACLineSegmentPhase or WirePosition (which also specify phase). Due to physical symmetry that is reflected in the matrix, only the lower triangle of the matrix is populated with the row and column method. That is, the column attribute is always less than or equal to the row attribute.

| ATTRIBUTES |
| --- |
| fromPhase : SinglePhaseKind Public **Attribute to be added**  Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False )  Description: Refer to the class description.  [ Is static True. Containment is Not Specified. ] |
| toPhase : SinglePhaseKind Public **Attribute to be added**  Multiplicity: ([0..1], Allow duplicates: 0, Is ordered: False )  Description: Refer to the class description.  [ Is static True. Containment is Not Specified. ] |