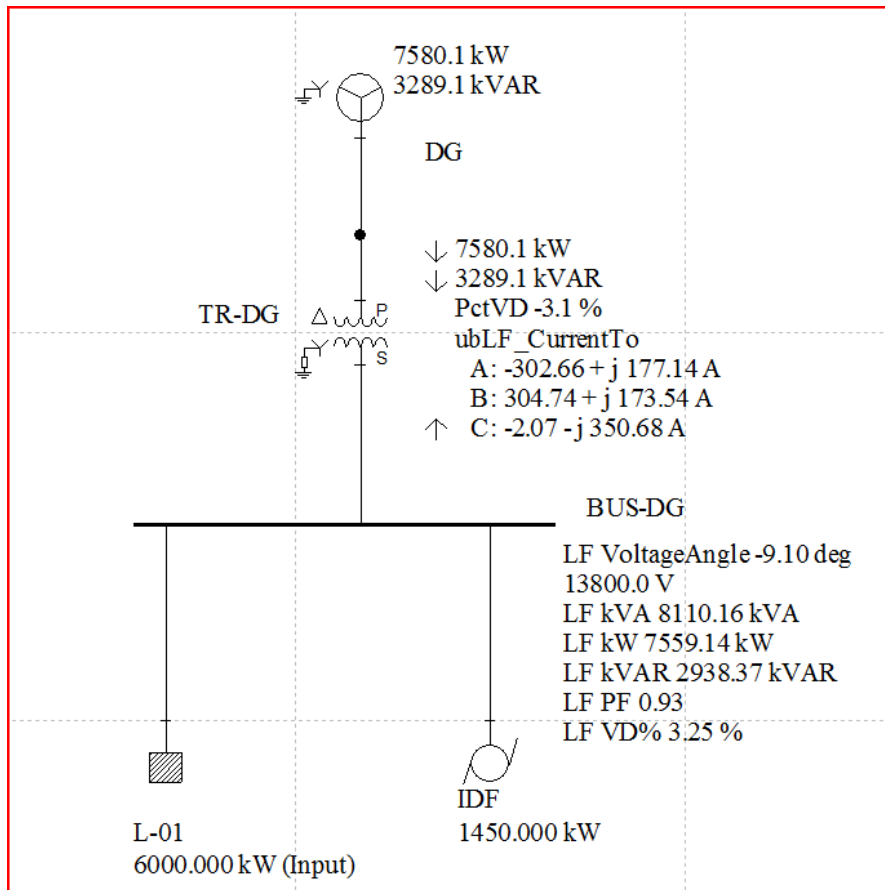


**Why I am receiving different DAPPER load flow results compared to I\*SIM/TMS load flow results in the same project?**

Both I\*SIM and TMS run an initial load flow study for a particular case. If the DAPPER LF datablocks on the one-line drawing are displayed while running I\*SIM/TMS, the datablock will be updated with the new calculated values.

In some cases a user may receive different DAPPER load flow results compared to the completed I\*SIM/TMS load flow. Here's an example of DAPPER load flow results:



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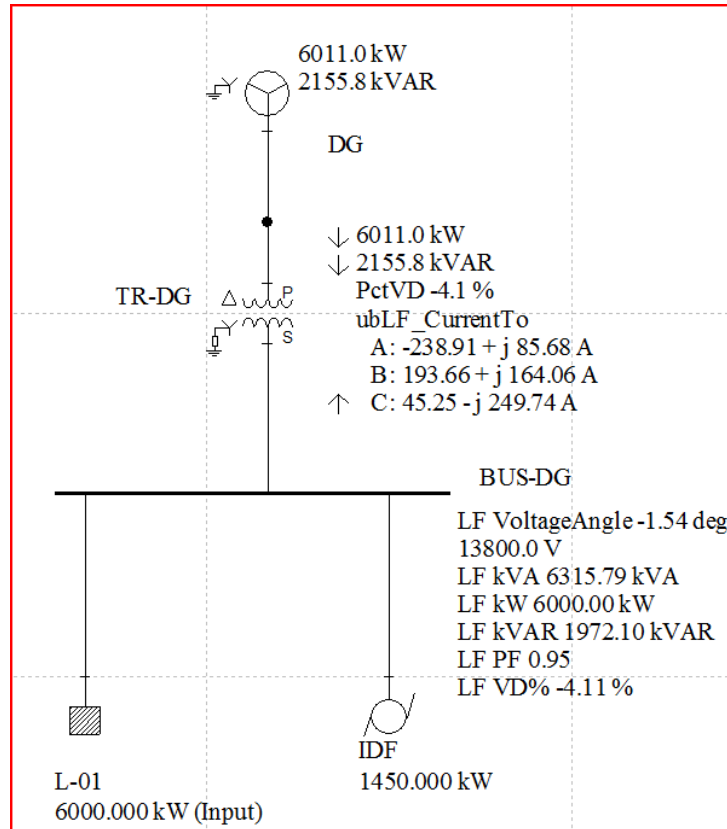
Originated by: Afshin Majd      Date: 12.18.2009  
Checked by:                              Date:  
Revised by:                              Date:  
Applicable to:                          Doc Rev No:



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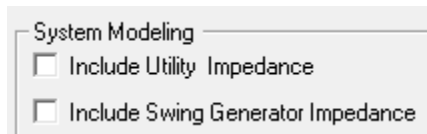
The following indicates a different load flow result after running I\*SIM:



As shown, the DAPPER load flow results and the VD% are different.

The following reasons account for the load flow differences:

1. The DAPPER load flow module will model the utility/swing generator impedance if enabled.

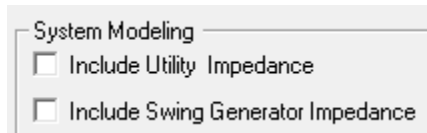


On the other hand, I\*SIM/TMS will not include the utility/swing generator impedance since the software assumes they already have a model.

2. I\*SIM/TMS will include the motor model that is selected from the corresponding dialog page in that *Study Case*. However, the DAPPER load flow will use the Component Editor page of the motor to model it.
3. Motors may not be started at t=0 seconds in I\*SIM/TMS. In other words, I\*SIM/TMS calculations will not see the motors at t=0 seconds. DAPPER load flow will consider the motors in the simulation.

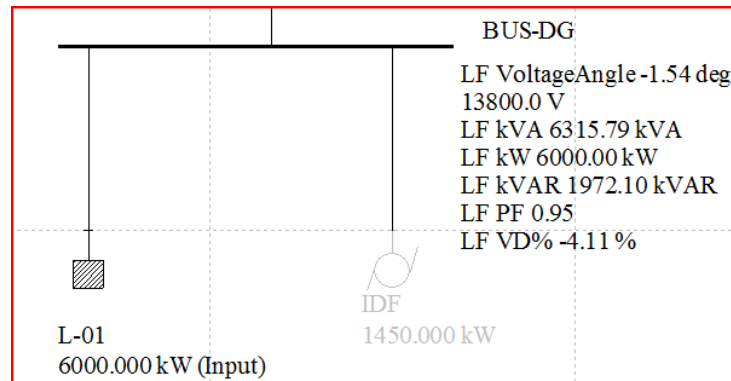
For identical DAPPER and I\*SIM/TMS load flow results:

1. Go to the DAPPER load flow study options and uncheck the follow two boxes:



2. Put the motors out of service for the follow reasons:
  - The motors may start at a time other than 0 seconds.
  - DAPPER load flow and I\*SIM/TMS don't use the same model for the motors.

DAPPER load flow results after applying the above modifications:



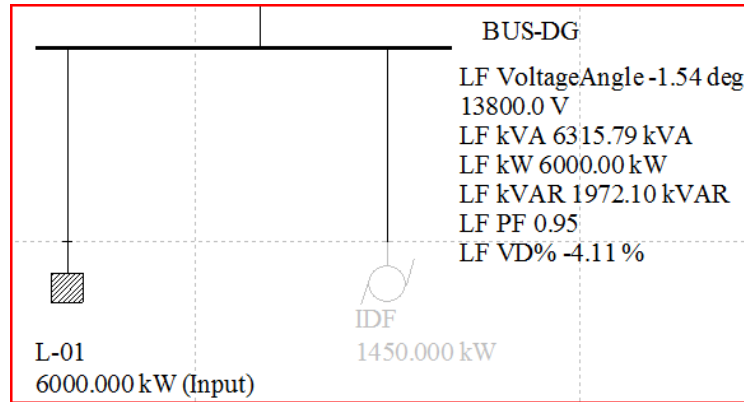
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I\*SIM/TMS load flow results after applying the above modifications:



An alternative solution is to deselect the motors from the I\*SIM/TMS case menu.

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