

The purpose of this document is to record what was done to enable HVDC in PST to use the structured global variable g and other 'clean up' actions taken.

Each paragraph describes the required changes to the PST file.

Initial globals:

```
%% HVDC link variables
global dcsp_con dcl_con dcc_con
global r_idx i_idx n_dcl n_conv ac_bus rec_ac_bus inv_ac_bus
global inv_ac_line rec_ac_line ac_line dcli_idx
global tap tapr tapi tmax tmin tstep tmaxr tmaxi tminr tmini tstepr tstepi
global Vdc i_dc P_dc i_dcinj dc_pot alpha gamma
global VHT dc_sig cur_ord dcr_dsig dci_dsig
global ric_idx rpc_idx Vdc_ref dcc_pot
global no_cap_idx cap_idx no_ind_idx l_no_cap l_cap
global ndcr_ud ndci_ud dcrud_idx dciud_idx dcrd_sig dcid_sig

% States
%line
global i_dcr i_dci v_dcc
global di_dcr di_dci dv_dcc
global dc_dsig % added 07/13/20 -thad
%rectifier
global v_conr dv_conr
%inverter
global v_coni dv_coni

% added to global dc
global xdcr_dc dxdcr_dc xdc_i_dc dxdc_i_dc angdcr angdci t_dc
global dcr_dc dci_dc % damping control
global ldc_idx
```

Modified globals:

```
global g
```

**Non-Linear files** \_\_\_\_\_

**handleNewGlobals**

- Addition of ind\_con and mld\_con to global g.ind

**xxx**

- Alterations us use global g.dc structure

## Linear Specific files

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xxx

- Alterations us use global `g.dc` structure

Alteration of system globals to use `g.dc` structure:

- `svm_mgen_Batch`
- `ns_file` (ran as a script)
- `p_m_file` (ran as a script)
- `p_file` (ran as a script)
- `p_cont` (ran as a script)