------- BEAMDYN V1.00.00 Driver INPUT FILE -------------------------------------

Dynamic analysis of rotating NREL 5MW blade under gravity force

---------------------- SIMULATION CONTROL --------------------------------------

0 t\_initial - Starting time of simulation (s)

30.0 t\_final - Ending time of simulation (s)

2E-03 dt - Time increment size (s)

---------------------- GRAVITY PARAMETER --------------------------------------

0.0 Gx - Component of gravity vector along X direction (m/s^2)

-9.8 Gy - Component of gravity vector along Y direction (m/s^2)

0.0 Gz - Component of gravity vector along Z direction (m/s^2)

---------------------- FRAME PARAMETER --------------------------------------

0.0 GlbPos(1) - Component of position vector of the reference blade frame along X direction (m)

0.0 GlbPos(2) - Component of position vector of the reference blade frame along Y direction (m)

1.0 GlbPos(3) - Component of position vector of the reference blade frame along Z direction (m)

---The following 3 by 3 matrix is the direction cosine matirx ,GlbDCM(3,3),

---relates global frame to reference blade frame

1.000E+00 0.000E+00 0.000E+00

0.000E+00 1.000E+00 0.000E+00

0.000E+00 0.000E+00 1.000E+00

---------------------- ROOT VELOCITY PARAMETER ----------------------------------

1.0006 RootVel(4) - Component of angular velocity vector of the beam root about X axis (rad/s)

0.0 RootVel(5) - Component of angular velocity vector of the beam root about Y axis (rad/s)

0.0 RootVel(6) - Component of angular velocity vector of the beam root about Z axis (rad/s)

---------------------- APPLIED FORCE ----------------------------------

0.0 DistrLoad(1) - Component of distributed force vector along X direction (N/m)

0.0 DistrLoad(2) - Component of distributed force vector along Y direction (N/m)

0.0 DistrLoad(3) - Component of distributed force vector along Z direction (N/m)

0.0 DistrLoad(4) - Component of distributed moment vector along X direction (N-m/m)

0.0 DistrLoad(5) - Component of distributed moment vector along Y direction (N-m/m)

0.0 DistrLoad(6) - Component of distributed moment vector along Z direction (N-m/m)

0.0 TipLoad(1) - Component of concentrated force vector at blade tip along X direction (N)

0.0 TipLoad(2) - Component of concentrated force vector at blade tip along Y direction (N)

0.0 TipLoad(3) - Component of concentrated force vector at blade tip along Z direction (N)

0.0 TipLoad(4) - Component of concentrated moment vector at blade tip along X direction (N-m)

0.0 TipLoad(5) - Component of concentrated moment vector at blade tip along Y direction (N-m)

0.0 TipLoad(6) - Component of concentrated moment vector at blade tip along Z direction (N-m)

---------------------- PRIMARY INPUT FILE --------------------------------------

"BeamDyn\_Input\_5MW.inp" InputFile - Name of the primary input file