DPW-VI: Requested Test Cases

- **Case 1: Verification Study**
  - 2D NACA0012 Airfoil - Turbulence Modeling Resource (TMR)
  - M=0.15, Re=6 million, AoA=10 deg, Farfield BC @ 500 Chords
  - Solution Converged on Adapted or Fixed Sequence Grid Family

- **Case 2: CRM Nacelle-Pylon Drag Increment**
  - Mach=0.85, Re=5 million, CL=0.5 +/-0.0001, ae2.75deg geometry
  - Grid Convergence Study on Baseline WB & WBNP Grid Families
  - [CD, CM, AoA, Mass-Flux] .vs. $N^{-(2/3)}$ [or other metric]

- **Case 3: CRM WB Static Aero-Elastic Effect**
  - Mach=0.85, Re=5 million
  - AoA Sweep with ETW Deflections
  - AoA=[2.50, 2.75, 3.00, 3.25, 3.50, 3.75, 4.00] degrees
  - Medium Baseline Grids: [7 Solutions on 7 Grids]

DPW-VI: Optional Test Cases

- **Case 4: CRM WB Grid Adaptation**
  - Mach=0.85, Re=5 million, CL=0.5 +/-0.0001, ae2.75deg geometry
  - Start Adaption Process from Tiny (or Coarse) Baseline Mesh
  - Participants Document Adaptation Process

- **Case 5: CRM WB Coupled Aero-Structural Simulation**
  - Mach=0.85, Re=5 million, CL=0.5 +/-0.0001
  - Medium Baseline Grid
  - FEM Supplied by NASA via CRM Website (Melissa Rivers)
    - Modal Shapes and Frequencies available

- **Cases 1-5: Participant Generated Grids**
  - Provide Documentation of Their Grid Systems
  - Submit Their Grids to the Public Domain
  - Also Run the Cases on the Baseline Grids