

**WATTS ON THE MOON CHALLENGE  
PHASE 2**

**Appendix C: NASA Review of Competition Level 2 Testing and Analysis Plans**

As noted, following the announcement of Competition Level 1 winners, NASA personnel will review each winning Team’s plan for Competition Level 2 testing and analysis and indicate whether the plan is “sufficient” or “insufficient” with regard to each of the Competition Level 2 Performance Metrics (see TABLE below). NASA will not provide any specific notes or suggestions to Teams regarding their plans; Teams will be solely responsible for updating their plans (if necessary) and executing their plans in Competition Level 2, as described in the competition rules.

TABLE 4 illustrates a sample evaluation form feedback that Competition Level 1 winners may expect to receive regarding their plan for testing and analysis.

TABLE 4.  
Sample Evaluation Form Provided to Competition Level 1 Winners

<b>Competition Level 2 Performance Metric</b>	<b>Evaluation of Team’s Plan</b>
End-to-end efficiency of any power transmission system	Sufficient
Mass of any power transmission system	Sufficient
Roundtrip efficiency and energy capacity of any energy storage system	Insufficient
Mass of any energy storage system	Sufficient
Operation in temperatures and atmospheric pressures that will be tested in Competition Level 3	Insufficient
Delivery of projected maximum power over a 3 km distance between the power source and load, where the demonstration is either a full-distance or a combination of a partial-distance test and emulation or analysis of extrapolation to the full distance.	Sufficient
For energy storage systems, demonstration of 30 charge/discharge cycles 1) in Earth ambient conditions or a colder environment; 2) at a depth of discharge equal to the planned depth of discharge during operations in Competition Level 3 testing; and 3) with no more than 20% loss of energy capacity	Sufficient