## 2020 Breakthrough, Innovative, and Game-changing (BIG) Idea Challenge Final Scoring Matrix



TECHNICAL PAPER (Max 80 Points)	Point Scale
Proof of Concept Testing:	
o Did the team adequately identify and mitigate the key risks associated with development and verification of	
the concept?	
Was the testing conducted at a high enough level of fidelity to provide confidence the concept would work	
in a lunar environment?	
Were the test results in line with the expected results developed through analytical methods?	
Did the team draw adequate conclusions about their design solution?  Did the proof of concent testing increase the concent's TRU level?	/Out of 20
o Did the proof-of-concept testing increase the concept's TRL level?	/Out of 30
Technical Credibility and Feasibility:      How well did the team's implementation of the concent most the original goals and chiestings?	
<ul> <li>How well did the team's implementation of the concept meet the original goals and objectives?</li> <li>Did the team demonstrate a cost-effective solution for advancing technology that supports operations at the</li> </ul>	
O Did the team demonstrate a cost-effective solution for advancing technology that supports operations at the lunar poles?	
Is the packaging and deployment strategy credible for launch and lunar landing?	
<ul> <li>Did the team identify and justify potential stakeholders/funders (i.e. Exploration, Science, Commercial)?</li> </ul>	/Out of 25
Technical Management:	70010125
<ul> <li>Did the team perform effective project management and demonstrate responsiveness to unplanned events?</li> </ul>	
How well did the team describe their ConOps, including all design assumptions and decisions and address	
fabrication, transport, deployment, and operations?	
<ul> <li>How well did the team manage the project's budget, schedule, and scope?</li> </ul>	
<ul> <li>How well did the team adhere to the provided requirements and constraints for the design competition?</li> </ul>	
<ul> <li>Did the team provide adequate justification for exceeding any established constraints?</li> </ul>	/Out of 15
Path-to-Flight:	
O Did the team provide adequate rationale for their trades and critical modifications made to the design for	
use on the Moon?	
o Have all of the needed components been identified and assessed for operation in the expected PSR	
environments?	/Out of 10
Total Points – Technical Paper Criteria	/80
PRESENTATION (Max 15 Points)	Point Scale
Quality of proof-of-concept demonstration	
Quality of presentation:	
Clear presentation of information provided in technical paper	
<ul> <li>Quality of response to questions for presentation, models and/or prototypes</li> </ul>	
Presence of teamwork and integration	/Out of 15
Total Points – Presentation Criteria	/15
POSTER SESSION (Max 5 Points)	Point Scale
Poster quality	
Clear presentation of information provided in technical paper	
Audience engagement with judges and other participants (including responses to questions)	/Out of 5
Total Points – Poster Session Criteria	/5
BONUS POINTS (Max 10 Points)	Point Scale
At the time of final Forum, has the concept demonstrated enough merit that NASA should consider investing     in making the concept flight ready?	
<ul><li>in making the concept flight-ready?</li><li>Is this technology in a position to be ready for use on the Moon in the early 2020s?</li></ul>	/Out of 10
Total Points – Bonus Section	-
Total Points – Bonus Section 1	/10

