Greetings!

I am glad to have the opportunity to reply to the Commission’s thoughtful questions. Having only become aware of this RFC on the day of its closing, I can only offer very brief comments.

The American agriculture industry is becoming increasingly reliant on GPS, IoT devices, and cyber-physical systems to create the nations’ food supply. So far, most discussion of “protecting agriculture” has focused on bioterrorism. However, as more farmers adopt digital agriculture technologies, security of these systems is becoming critically important. There are some actors who would specifically like to target industrial-scale agriculture, and if they could create digital disruption at planting or harvest time, they would doubtlessly cause some crop losses. Perhaps these wouldn’t be large losses at first, but the novelty of them would surely gain some attention for these attacks. Escalation theory suggests other attacks would follow and ag attacks would become part of the playbook of any country at war with the US (militarily or otherwise), or anyone who believed that attacking agriculture would help the environment.

Three places to examine these issues:

AgGateway, an agriculture industry consortium focused on enabling “eAgriculture” by promoting, improving, and adopting common standards.

NIST, which already has communities of practice for critical infrastructure participants (e.g. the maritime sector, energy sector). NIST’s creation and evangelization of the NIST Cybersecurity Framework for Critical Infrastructure would be a valuable tool for organizing ag industry discussions of cybersecurity topics.

Iowa State University is one of only seven NSA-certified centers of academic excellence in information assurance education, and has one of the best agronomy departments in the world. There is some energy and interest around combining these strengths to help address emerging cybersecurity issues in agriculture.

I will create a website at http://agdatasecurity.com to post a more thorough analysis.

Thank you for the opportunity to provide comments on this very important issue.

Rachel M. Garrett
Chair, AgGateway Data Privacy & Security Committee
ISU student, Agronomy & Computer Engineering

(515) 979-5409
rgarrett@iastate.edu
1218 Delaware Ave #4
Ames, IA 50014