

Peer Review Plan

Preliminary Title: Production Cost and the Joint Adoption of Precision Technologies

Type of Report (ERR, EIB, EB) ERR

Agency: Economic Research Service [X] Influential Scientific Information
USDA [] Highly Influential Scientific Assessment

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Subject of Review: In spite of the potential for precision agriculture technologies--yield-monitoring harvesters, tractor guidance systems, GPS soil mapping, and variable rate input application—to reduce input costs, adoption has been far from universal. This report uses the 2010 Agricultural Resource Management Survey of corn producers to examine the adoption of precision agriculture technologies and their impact on input expenditures. Using a treatment-effects model, three scenarios of adoption are examined. Each scenario contains an entry-level technology (yield monitors) and an advanced technology (variable rate application technology), with the intermediate step varying between three technologies: yield mapping, GPS soil properties mapping, and guidance systems. The analysis examines the impact of individual precision agricultural technologies and combinations of jointly adopted technologies.

Purpose of Review: The purpose of the review is to ensure the high-quality of the economic analysis, transparent explanation of methods, objective interpretation of results, and effective communication to the intended audience.

Type of Review: [] Panel Review [X] Individual Reviewers

[] Alternative Process (Briefly Explain):

Timing of Review (Est.): Start: 11/9/12 End: 02/22/13 Completed: 08/21/13

Number of Reviewers: [] 3 or fewer [X] 4 to 10 [] More than 10

Primary Disciplines/Types of Expertise Needed for Review: Economists

Reviewers selected by: [X] Agency [] Designated Outside Organization
Organization's Name:

Opportunities for Public Comment? [] Yes [X] No

If yes, briefly state how and when these opportunities will be provided:

How:

When:

Peer Reviewers Provided with Public Comments? [] Yes [X] No

Public Nominations Requested for Review Panel? [] Yes [X] No

