

Petroleum Additives Panel Product Approval Protocol Task Group (PAPTG)

Technology Demonstration Period

The purpose of the Technology Demonstration period is to prove the capability of additive technologies across multiple base stocks and viscosity grades to meet all of the performance requirements in a proposed specification or supplemental specification.

The Technology Demonstration period is 12 months long and is followed by a time period to finalize the specification. ACC PAPTG declares the start of the Technology Demonstration period and determines if the length should be adjusted from 12 months on a case-by-case basis.

ACC PAPTG supports the start of Technology Demonstration when the following requirements have been met:

- 1. All tests proposed for the category are available. Available is defined as the following:
 - a. Test procedure is established and cannot change.
 - b. Test is able to be scheduled and run within a reasonable time at an independent lab with all of the final test procedure-defined materials and sufficient test capacity is available.
- 2. Proposed targets for all performance criteria of the test is/are known and provided.

During Technology Demonstration Period, ACC PAPTG members do the following:

- 1. Validate that the needs statement requirements can be delivered.
- 2. Understand formulating tradeoffs:
 - a. Generate data on a balanced formulation to attempt to meet all the draft spec criteria.
 - b. Attempt to assure proposed limits on tests are not in conflict with each other in terms of what oils can do.
- 3. Develop and refine formulation capabilities.
- 4. Develop data to help validate meaningful limits.
- 5. Develop adequate field support of formulation space near final candidate formulations.