



GSI-191

Treatment of Coatings Debris

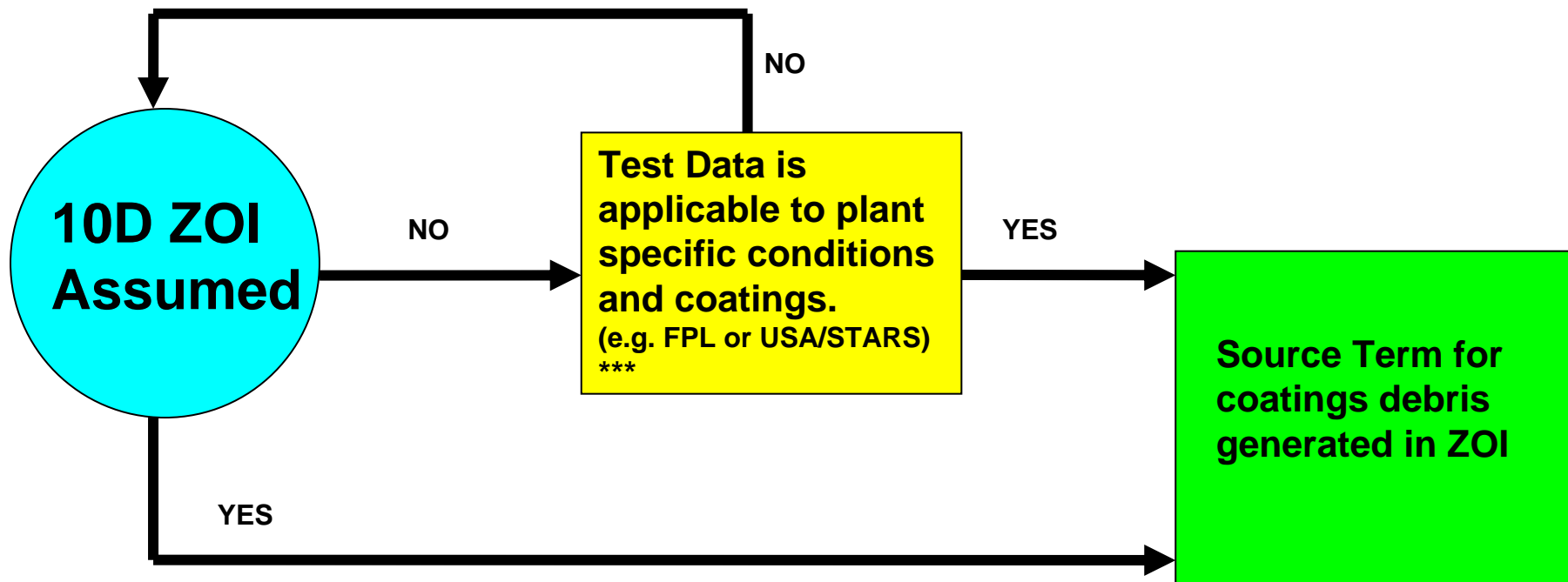
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Purpose

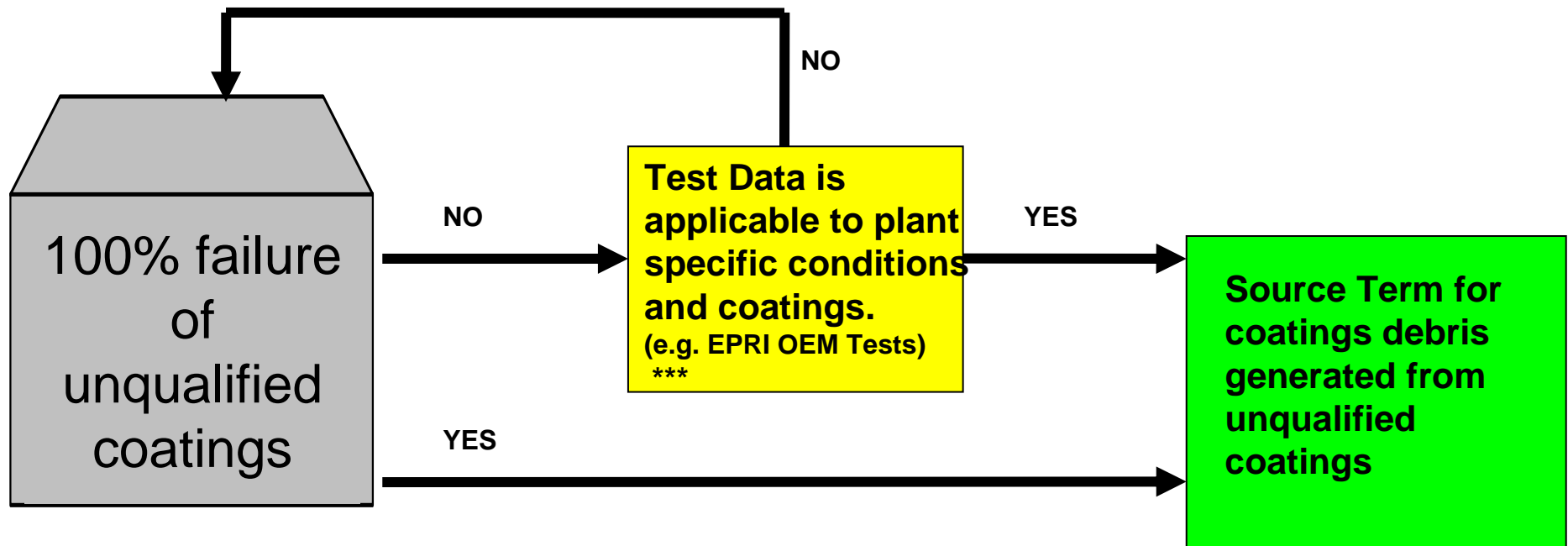
- Provide NRC expectations for treatment of all coatings debris
 - Debris Generation
 - ZOI, Unqualified, & Degraded Qualified
 - Debris Characteristics
 - Chips vs. Particulate
 - Debris Transport
 - Applicability of NRC Chip Transport Data
- Provide NRC expectations for testing to verify adequacy of visual assessment

Logic to Determine Debris Generation from Coatings within the ZOI



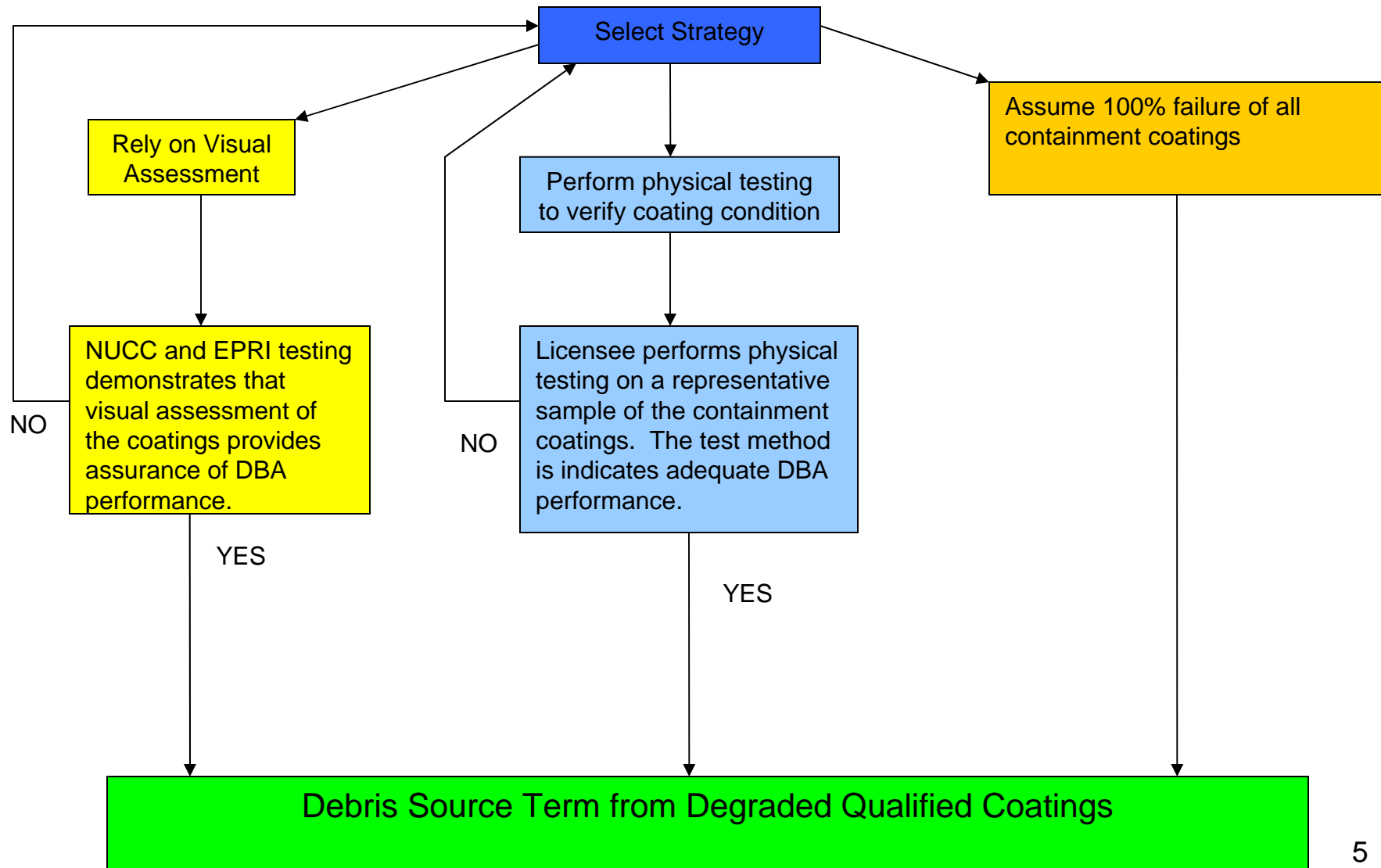
***Note that NRC has not completed its review of this testing. Licensees may need to address technical issues in order to credit test results in their analysis.

Logic to Determine Debris Generation from Unqualified Coatings

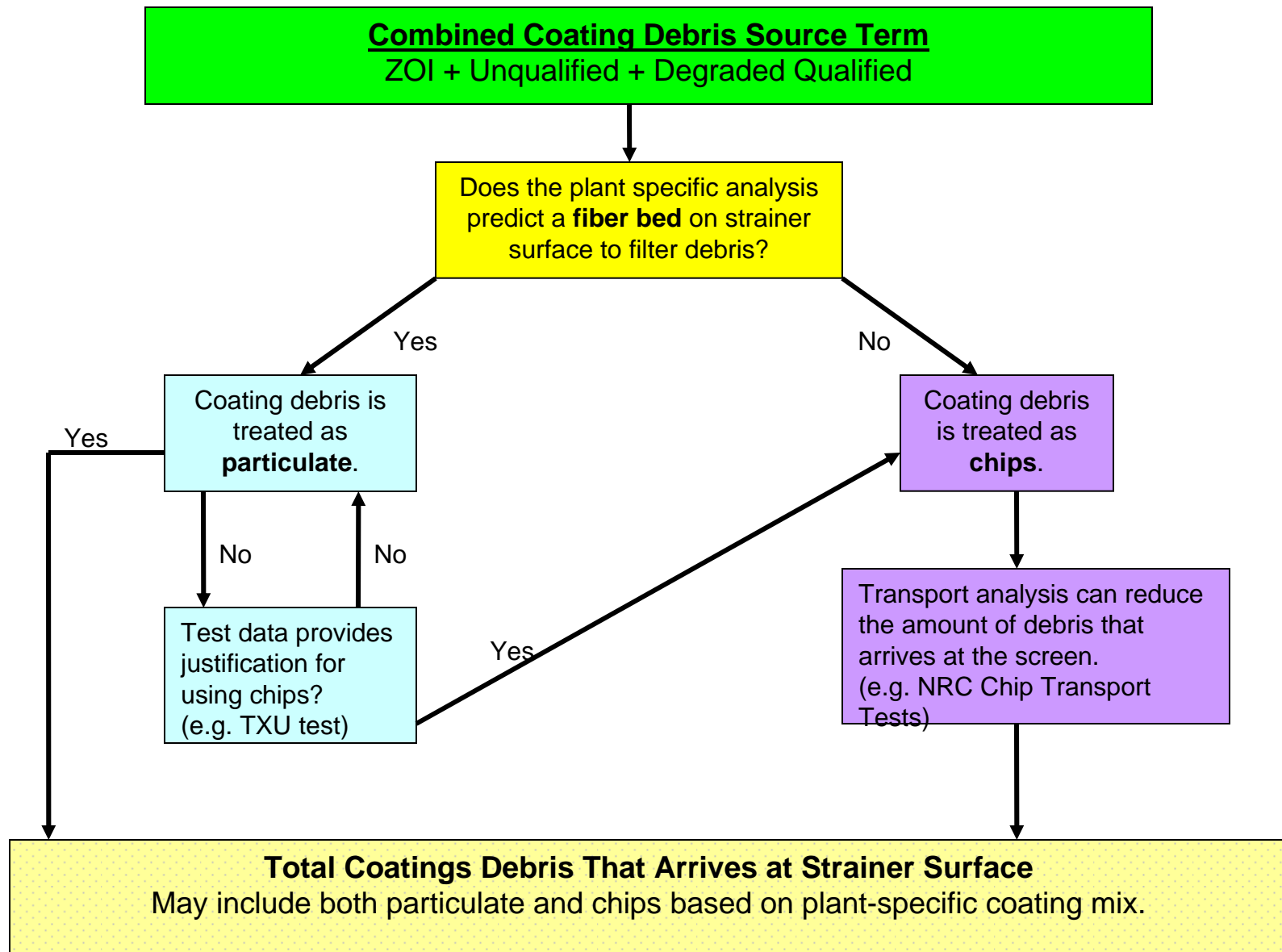


***Note that NRC has not completed its review of this testing. Licensees may need to address technical issues in order to credit test results in their analysis.

Logic to Determine Debris Generation from Degraded Qualified Coatings (Outside ZOI)



Debris Characteristics & Transport to the Strainer



Visual Assessment

- NRC Expectations for NUCC/EPRI Testing
 - A representative data set should be provided
 - Testing should encompass as many coating types as feasible.
 - Testing should provide a reasonable sample of actual plant conditions.
 - Testing should be informed by EPRI survey data on likely locations for degraded coatings and coating types that are likely to be degraded.
 - Testing should include incremental testing near visually degraded coatings
 - How far beyond a visual defect is the coating degraded?
 - How far do you have to go before an acceptable adhesion value is recorded?
 - This may provide valuable information for plants to use when estimating total areas of degradation during routine assessments.

Visual Assessment

- NRC Comments on NUCC/EPRI Testing
 - Justification for passing criteria
 - Industry test procedure establishes 200 lbs as the passing value for an Elcometer adhesion test.
 - Justification (beyond citing ANSI N5.12) should be provided as to why this value represents a threshold for DBA performance.
 - NRC observations of testing to date
 - NRC staff has observed testing at 1 plant (San Onofre).
 - Initial indication is that testing was successful.
 - More data needed: additional plants, additional coating types, and further inspection of degraded areas.
 - What is the projected date for issuance of the final report?

Acronyms

DBA - design basis accident

EPRI - Electric Power Research Institute

FPL test - Florida Power & Light, refers to the zone of influence testing sponsored by FPL

NUCC – Nuclear Utilities Coatings Council

OEM - Original Equipment Manufacturer, refers to EPRI testing of unqualified coatings

TXU test – refers to the simulated DBA testing of failed coatings chips by Comanche Peak

USA/STARS test - refers to the zone of influence testing sponsored by the USA/STARS plants

ZOI - zone of influence