



NFRC'S INDEPENDENT VERIFICATION PROGRAM

Presentation and Q & A Forum

March 13, 2013
National Fenestration
Rating Council

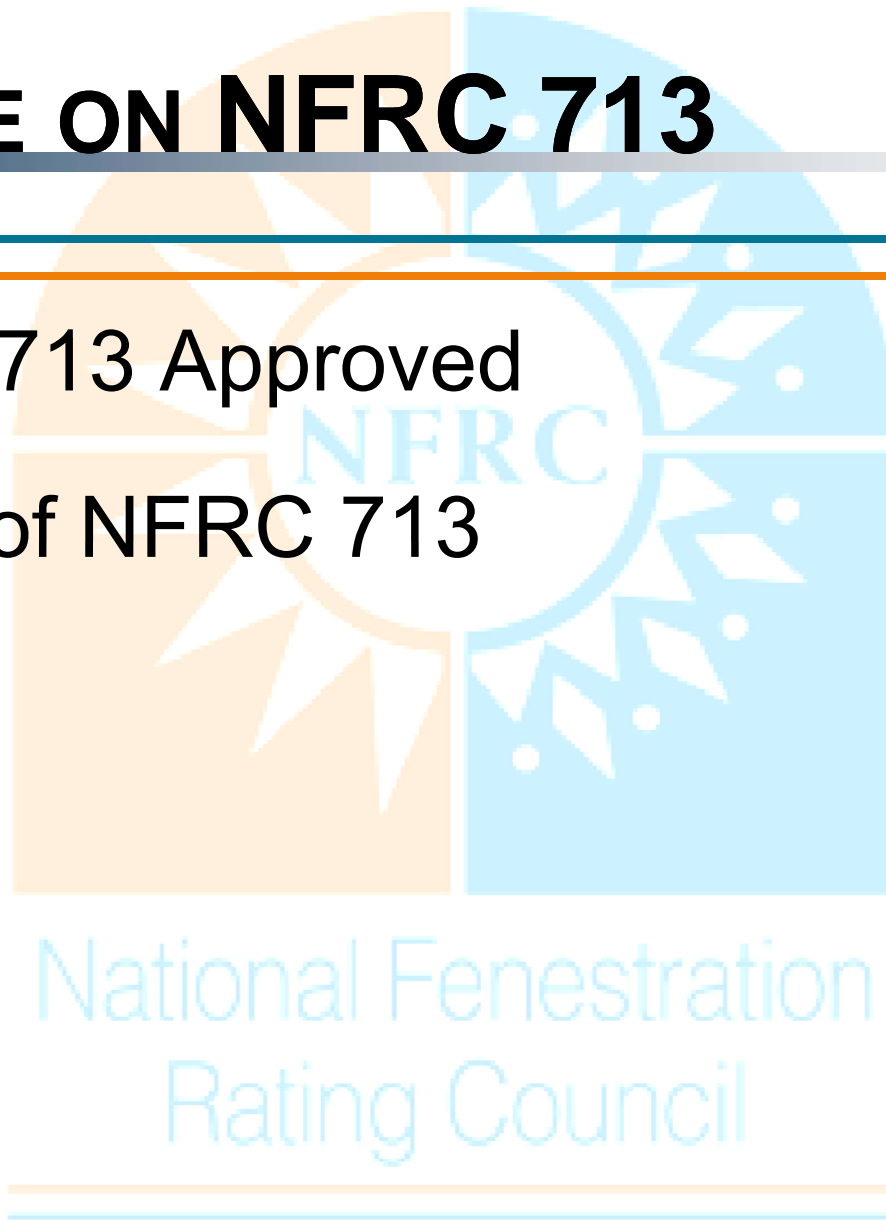
IVP FORUM AGENDA

- Update on NFRC 713
- Enrollment Process
- Product Line Registration
- Product Procurement
- Product Testing
- Testing Results
- Q & A

**Please hold questions to the end
of the presentation**

UPDATE ON NFRC 713

- NFRC 713 Approved
- Drafts of NFRC 713



NFRC 713 APPROVED

- Board approved NFRC 713.
- Enrollment began March 5th
- Deadlines March 31st
- Invoice Participants in April
- May 1st IVP begins

UPDATE ON NFRC 713 DRAFTS

- Differences between March 2012 draft and November 2012 draft
- Differences between November 2012 draft and March 2013 publication

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MARCH 2012 - NOVEMBER 2012

- Separation from NFRC 700 (PCP) – only ENERGY STAR Partners can participate
- Modified the requirements when a product option is unavailable for testing
- Only NFRC 102 test
- Component evaluation used for verification
- Grading of results are based on ENERGY STAR values only
- Questionable results beyond Participant's jurisdiction
- Removed complex compliance flowchart
- IVP fees are separate from PCP fees

WHAT ARE THE FEES?

- There are member and non-member fees
- The NFRC 704 Fee Schedule contains the fees to participate in the IVP.
 - Participation fees: \$1,500 / \$2,500
 - Product Line fees: \$100 / \$150

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NOVEMBER 2012 - MARCH 2013

- No change to the roles
 - No change to the selection process
 - No change to testing (NFRC 102)
 - Gas is verification only
 - Removed “suspended” language with ENERGY STAR
 - Recent comments...
-
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RECENT COMMENTS

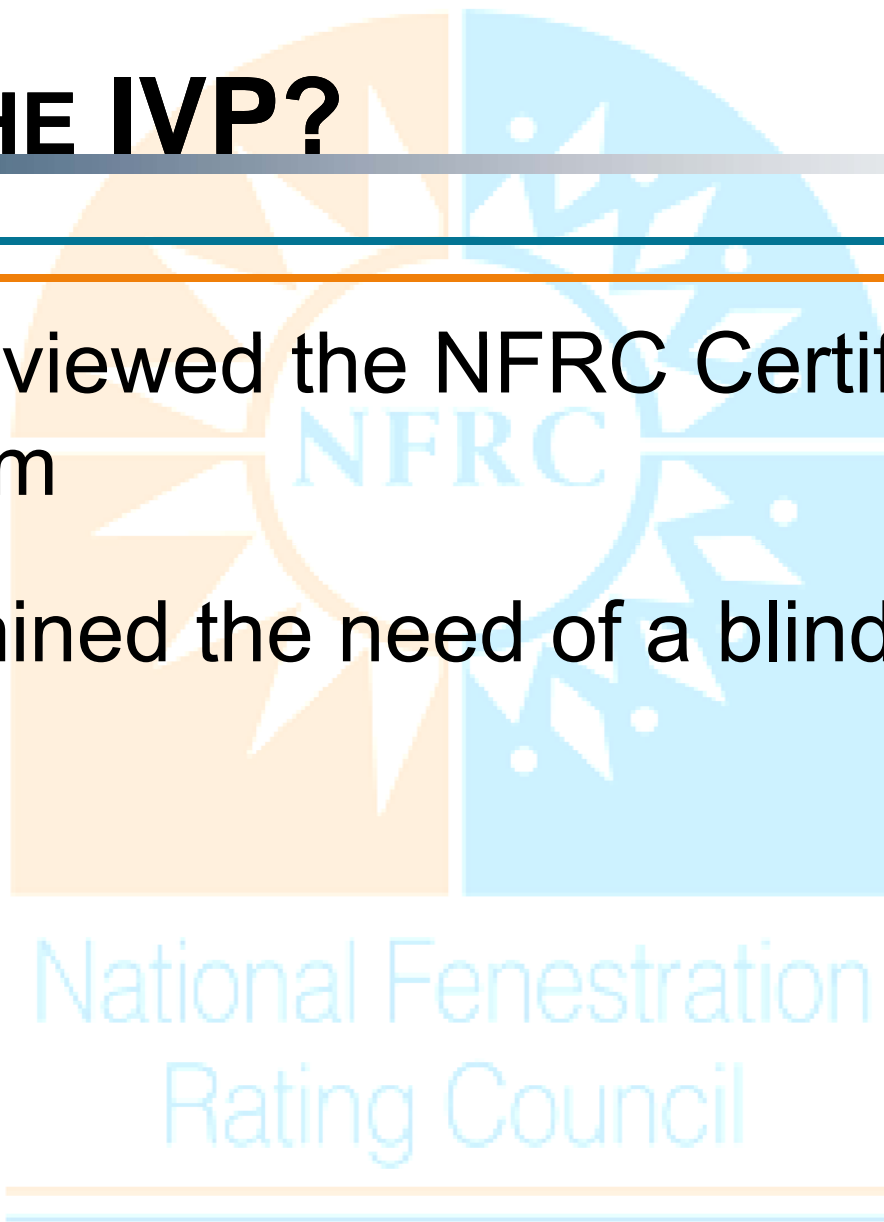
- Clarification the relationship between tolerances and grading.
- Why do we need the IVP?

The logo of the National Fenestration Rating Council (NFRC) is a large, semi-transparent watermark in the background. It features a stylized sun or starburst design in orange and blue, with the letters 'NFRC' in the center.

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WHY THE IVP?

- EPA reviewed the NFRC Certification Program
- Determined the need of a blind verification



IVP FORUM AGENDA

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ENROLLMENT PROCESS

- Enrollment started March 5, 2013 with a March 31, 2013 deadline.
- NFRC requires information from participants:
 - Sign an agreement to participate in the NFRC IVP.
 - Provide details about which product lines include ENERGY STAR qualified product options that are available for sale.

Both processes are online!

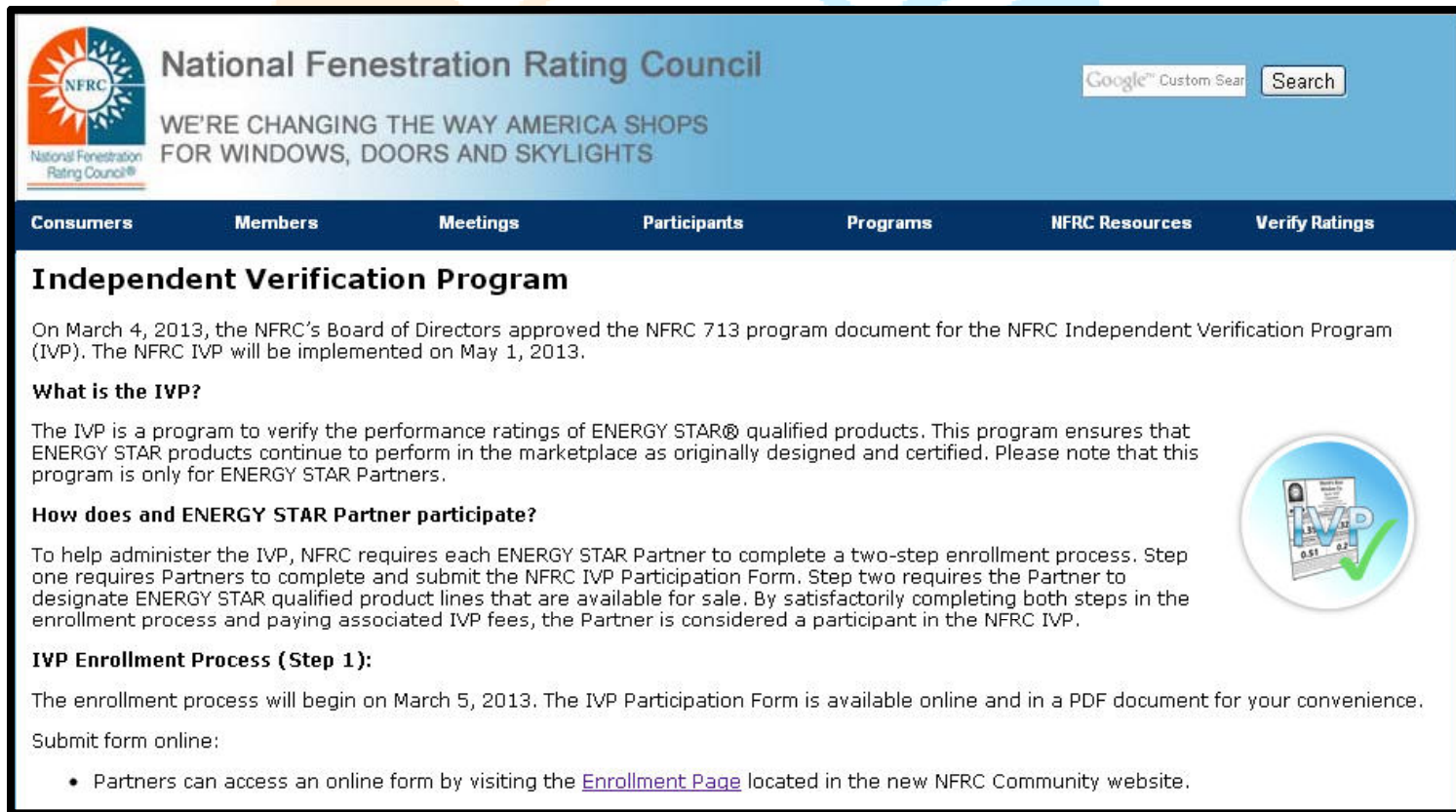
IVP WEBPAGE

The screenshot shows the NFRC website with a navigation menu. The 'Programs' menu is open, and the 'Independent Verification Program (IVP)' option is highlighted with a mouse cursor. The website header includes the NFRC logo, the text 'National Fenestration Rating Council', and the slogan 'WE'RE CHANGING THE WAY AMERICA SHOPS FOR WINDOWS, DOORS AND SKYLIGHTS'. A search bar is located in the top right corner. The main content area features a large image of a window with a performance rating label. The label includes the following data:

World's Best Window Co. Series "2000" UFGP 017-1-00	
ENERGY PERFORMANCE RATINGS	
U-Factor (U.S. I/F)	Solar Heat Gain Coefficient
0.30	0.30
ADDITIONAL PERFORMANCE RATINGS	
Visible Transmittance	Air Leakage (U.S. I/F)
0.51	0.2
Condensation Resistance	
51	-

The 'Programs' menu includes: Product Certification Program (PCP), Component Modeling Approach Program (CMA), Site Built Program, Laboratory Accreditation Program (LAP), Certification Agency Program (CAP), Compliance and Monitoring (CAMP), and the highlighted Independent Verification Program (IVP). The IVP description reads: 'ANS Standards Development, Educational Programs, Research Program'. The 'Verify Ratings' section contains the text: 'The NFRC label can be found on all ENERGY STAR® qualified windows, doors, and skylights and provides performance ratings. More... < Previous | Next >'.

IVP WEBPAGE



The screenshot shows the NFRC website header with the logo and tagline "WE'RE CHANGING THE WAY AMERICA SHOPS FOR WINDOWS, DOORS AND SKYLIGHTS". A navigation menu includes links for Consumers, Members, Meetings, Participants, Programs, NFRC Resources, and Verify Ratings. The main content area is titled "Independent Verification Program" and contains the following text:

On March 4, 2013, the NFRC's Board of Directors approved the NFRC 713 program document for the NFRC Independent Verification Program (IVP). The NFRC IVP will be implemented on May 1, 2013.

What is the IVP?

The IVP is a program to verify the performance ratings of ENERGY STAR® qualified products. This program ensures that ENERGY STAR products continue to perform in the marketplace as originally designed and certified. Please note that this program is only for ENERGY STAR Partners.


How does and ENERGY STAR Partner participate?

To help administer the IVP, NFRC requires each ENERGY STAR Partner to complete a two-step enrollment process. Step one requires Partners to complete and submit the NFRC IVP Participation Form. Step two requires the Partner to designate ENERGY STAR qualified product lines that are available for sale. By satisfactorily completing both steps in the enrollment process and paying associated IVP fees, the Partner is considered a participant in the NFRC IVP.

IVP Enrollment Process (Step 1):

The enrollment process will begin on March 5, 2013. The IVP Participation Form is available online and in a PDF document for your convenience. Submit form online:

- Partners can access an online form by visiting the [Enrollment Page](#) located in the new NFRC Community website.



<http://www.nfrc.org/IVP/Default.aspx>

ENROLLMENT FORM - ONLINE

The screenshot shows a web page for the "2013 IVP Participation Form". At the top is a navigation bar with links: Home, Membership, Participants, Volunteers & Leadership, NFRC Resources, Meetings & Workshops, Groups, and NFRC News. The main content area has a title "2013 IVP Participation Form" with a star icon. Below the title are social media share buttons for + Share, LinkedIn, Facebook, Twitter, and Email. The text explains that as a partner in the ENERGY STAR program, users must undergo independent verification testing (IVP) in 2013. It states that NFRC is requesting each partner to fill out and submit this form to assist in administering the IVP. There are four form fields: "Company Name", "Primary Contact Name", "Primary Contact Email", and "Primary Contact Phone", each with a red asterisk indicating it is required. On the right side, there is a sidebar with three sections: "COMMUNITY SEARCH" with a search input field and a "Search »" button; "MY PROFILE" with a list of links: Profile Home, Public Profile, Manage Profile, Groups, Networks, Files & Links, Favorites, Messages, Connections, and Membership Info; and "CALENDAR" with a dropdown arrow and three events: "4/8/2013 » 4/10/2013 2013 NFRC Spring Committee Meeting", "4/21/2013 » 4/28/2013 The International Code Council's Code Development Hearings", and "6/9/2013 » 6/12/2013 AAMA's National Summer Conference".

Forms are available for download

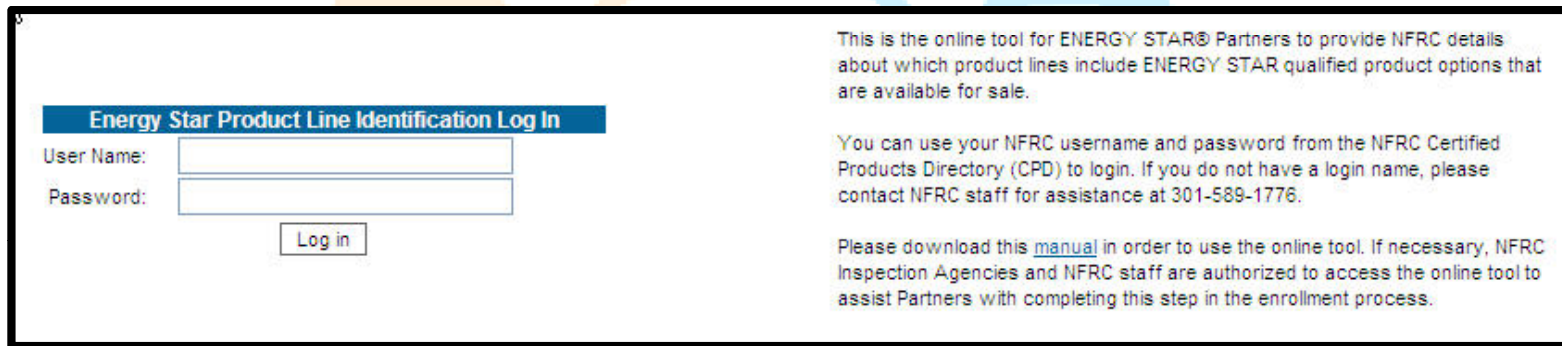
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PRODUCT LINE REGISTRATION

- Required to designate product lines, which include ENERGY STAR qualified individual product options, that are available for sale.
 - The product line fee is based on the number of product lines designated by the Participant.
 - Deadline is March 31, 2013
 - Update product lines during the year.
 - Please designate your product lines now!
-
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LOGIN ON WEBSITE



The screenshot shows a web form titled "Energy Star Product Line Identification Log In". It contains two input fields: "User Name:" and "Password:". Below the password field is a "Log in" button. To the right of the form, there is explanatory text: "This is the online tool for ENERGY STAR® Partners to provide NFRC details about which product lines include ENERGY STAR qualified product options that are available for sale." followed by "You can use your NFRC username and password from the NFRC Certified Products Directory (CPD) to login. If you do not have a login name, please contact NFRC staff for assistance at 301-589-1776." and "Please download this [manual](#) in order to use the online tool. If necessary, NFRC Inspection Agencies and NFRC staff are authorized to access the online tool to assist Partners with completing this step in the enrollment process."

Use current CPD username and password

<http://pesi.nfrc.org/>

ONLINE PROCESS

The screenshot shows the 'Energy Star Product Line Identification' web application. At the top left is the Energy Star logo and the text 'Energy Star Product Line Identification'. Below this is a 'Manufacturer' tab and a 'Log off' link. A 'Product Line Summary: 123XYZ Company' is displayed. A table lists product line entries with columns for CPD Number, Grouped With, Status Code, Series/Model Number, Operator Type, Initial Certification Date, Certification Date, Expiration Date, On Schedule 2, and Energy Star Line. The table includes seven rows of data. Above the table are buttons for 'Update', 'Select All', 'Deselect All', and 'Reset'.

CPD Number	Grouped With	Status Code	Series/Model Number	Operator Type	Initial Certification Date	Certification Date	Expiration Date	On Schedule 2	Energy Star Line
XYZ-A-54		08	Fixed 2006 JOHN VAUGHAN	FIXD	11/21/2006	11/21/2006	10/10/2010		<input checked="" type="checkbox"/>
XYZ-A-74	XYZ-T-68	06	Premium Vinyl Horizontal Slider w/ and w/o Filler Bar	VSDH	08/01/2008	08/01/2008	07/11/2011	Yes	<input checked="" type="checkbox"/>
XYZ-K-2	XYZ-T-84	06	Upgrade SQL 2008 - Recert.	FIXD	08/16/2009	08/16/2009	08/16/2013		<input type="checkbox"/>
XYZ-K-52			Fixed 2006 SHARON	FIXD	11/20/2006	11/20/2006	10/10/2010	Yes	<input type="checkbox"/>
XYZ-K-53			Fixed 2006 JENNIFER	FIXD	11/21/2006	11/21/2006	10/10/2010	Yes	<input checked="" type="checkbox"/>
XYZ-K-55			Fixed 2006 NIKKI	FIXD	11/27/2006	11/27/2006	10/10/2010	Yes	<input checked="" type="checkbox"/>
XYZ-K-76			No CR, No SHGC / VT	HSXX	12/04/2008	12/04/2008	01/01/2012	Yes	<input checked="" type="checkbox"/>

Review manual to understand buttons

PRODUCT LINE SELECTION EXAMPLE

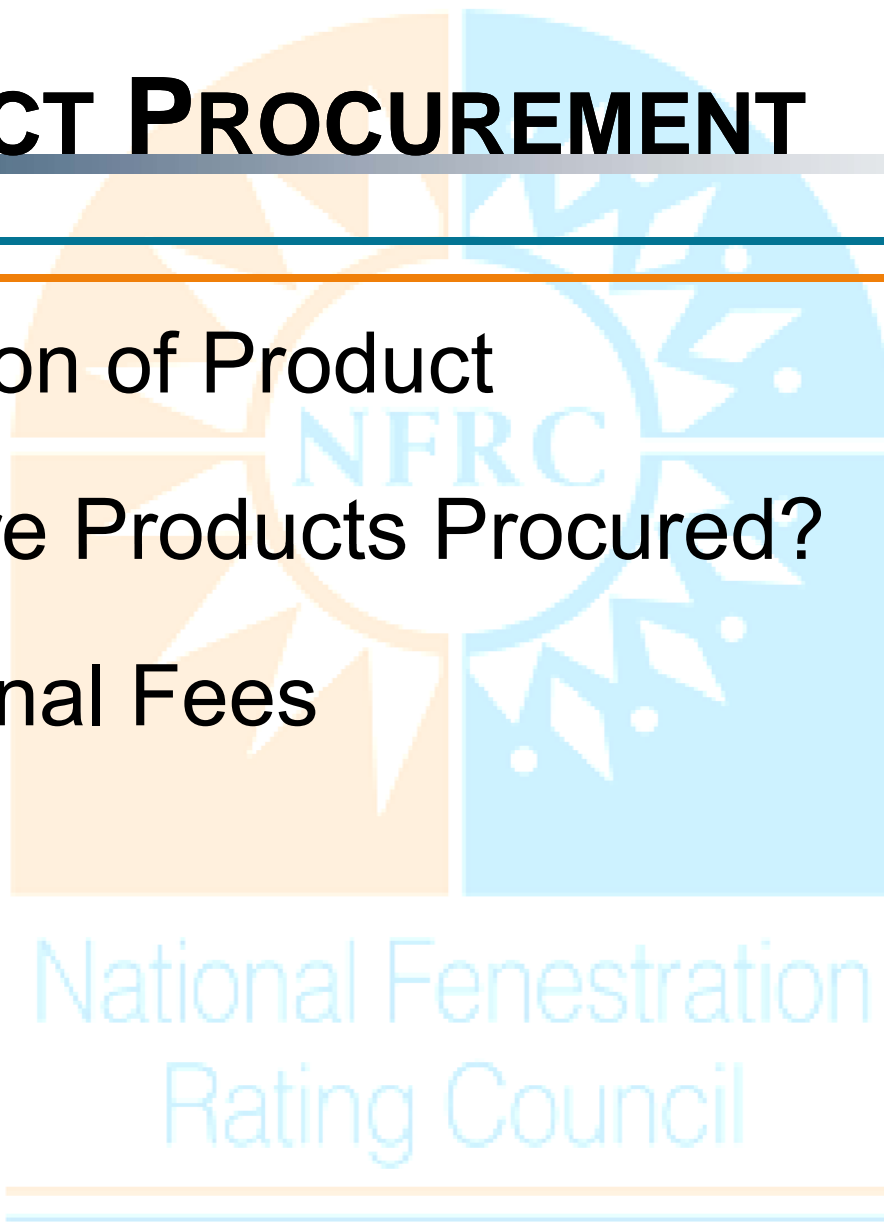
- A Participant may have a total of 20 product lines and 10 of those product lines include ENERGY STAR qualified options.
- The Participant may only sell ENERGY STAR qualified product options in 5 of the product lines.
- Participant selects those 5 product lines only upon which the IVP product line fees are based.

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PRODUCT PROCUREMENT

- Selection of Product
- How are Products Procured?
- Additional Fees



SELECTION OF PRODUCT

- Certification Body (CB) criteria is to select 10% of designated product lines
- NFRC selects 50% using IVP algorithm meeting CB directives.
 - Section 2 of NFRC 713.
- EPA selects 50%

HOW ARE PRODUCTS PROCURED?

- Direct contact
 - Staff will contact the Participant's representative listed on the IVP information form.
 - Participant will ship the product to the lab designated by NFRC.
 - NFRC to provide a Participant's guideline document.
 - If a product is not available for testing, another product will be chosen.
- Blind manner
 - Staff will work independently and not involve the Participant.

ADDITIONAL FEES

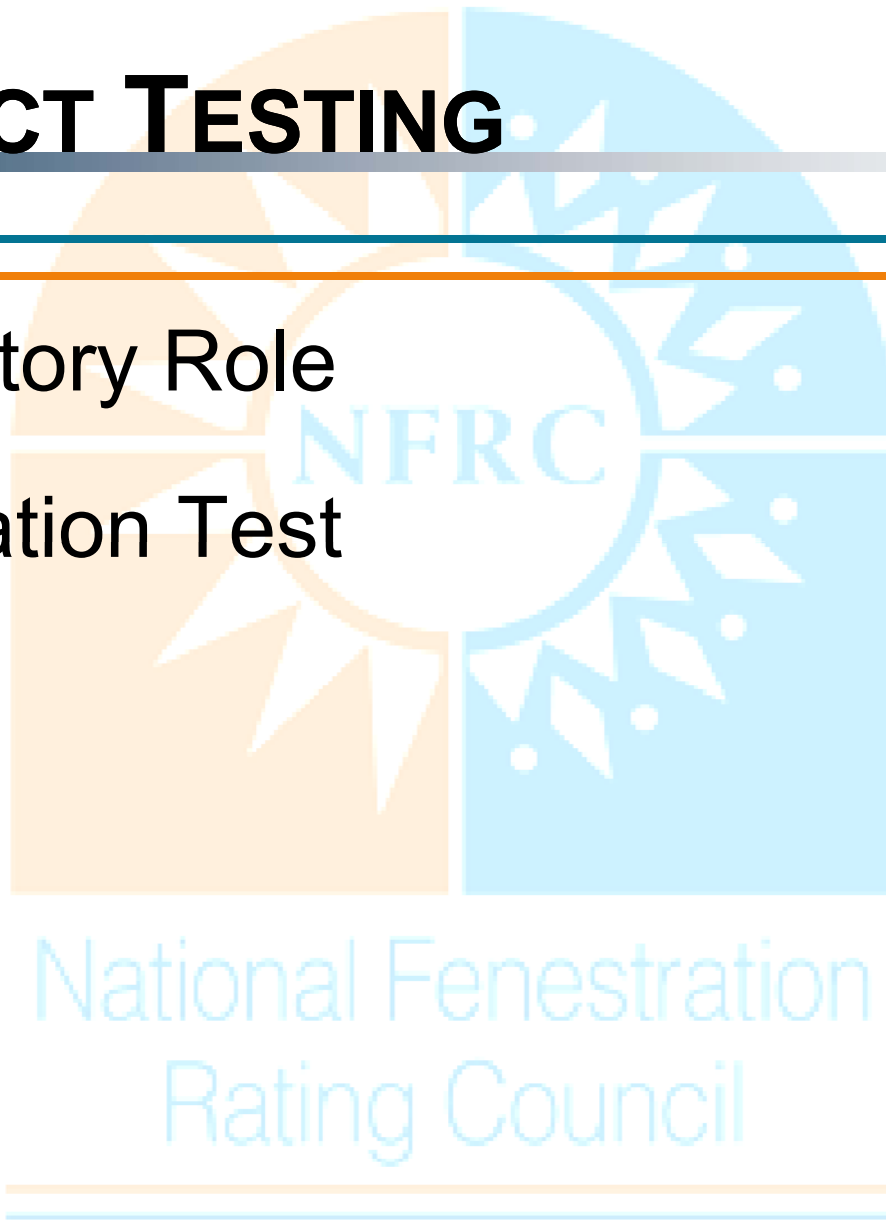
- The fees listed in the NFRC 704 will cover the cost to procure and test the initial product selected for IVP.
 - The Participant is responsible for any additional costs that may occur, such as:
 - a second product for corrective action testing;
 - possibly other expenses if the Participant would like to review the product at the lab, etc.
-
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PRODUCT TESTING

- Laboratory Role
- Verification Test



LABORATORY ROLE

- Section 3.1 of NFRC 713
- NFRC to provide the laboratory guideline document
- Requirements in NFRC 701 documents
- Inspect product upon receipt

VERIFICATION TEST

- The IVP verification test will be a thermal test.
 - Lab performs a NFRC 102 thermal test and forwards the results to NFRC staff for review.
 - At NFRC's direction, the lab performs a component evaluation (cut-up) of the product and provides a final report to NFRC.

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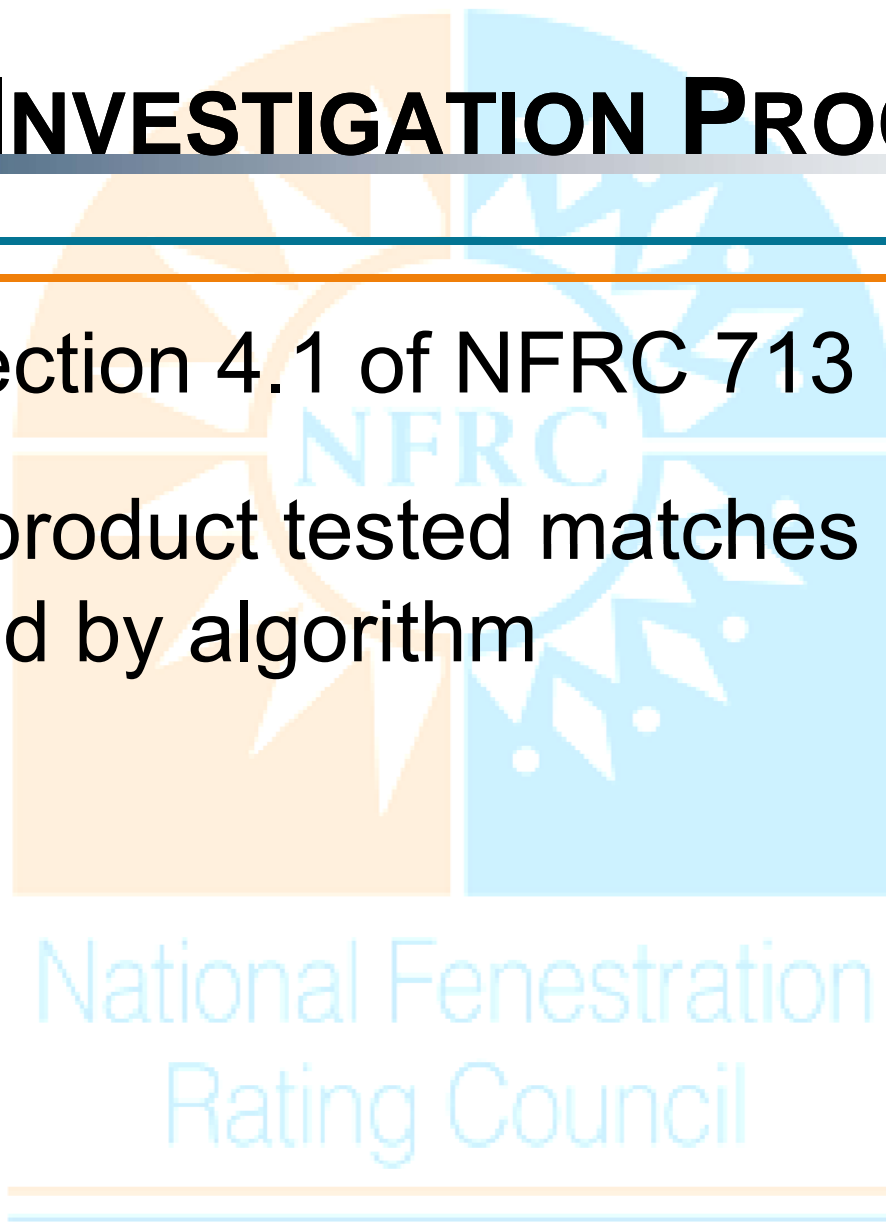
TESTING RESULTS

- Staff Investigation Process
- Performance rating tolerances
- Labeling tolerances
- Requirements for Unsuccessful Test

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STAFF INVESTIGATION PROCESS

- See Section 4.1 of NFRC 713
- Verify product tested matches product selected by algorithm



PERFORMANCE RATING TOLERANCES

- See Section 4.2 through 4.4 of NFRC 713
- Comparison of the verification test results are based on the U-factor tolerances
 - 0.03 / 10%
- Compared against ENERGY STAR qualification performance zone requirements
 - Tables 2, 3, and 4

TOLERANCE AND GRADE EXAMPLE

Table 1 - Tolerances

Certified U-factor¹	Accepted Difference Between Tested and Certified U-factor
1.7 W/m ² K (0.3 Btu/h·ft ² ·°F) or less	0.17 W/m ² K (0.03 Btu/h·ft ² ·°F)
Greater than 1.7 W/m ² K (0.3 Btu/h·ft ² ·°F)	10% of Simulated U-factor

¹ Certified U-factor may be adjusted due to tested product size not equivalent to the NFRC model size

Table 2 - Grades

Windows			
Climate Zone	Required U-factor	Successful Test U-factor Tolerances	Unsuccessful Test U-factor Tolerances
Northern	≤ 0.30	≤ 0.33	≥ 0.34
	= 0.31	≤ 0.34	≥ 0.35
	= 0.32	≤ 0.35	≥ 0.36
North-Central	≤ 0.32	≤ 0.35	≥ 0.36
South-Central	≤ 0.35	≤ 0.39	≥ 0.40
Southern	≤ 0.60	≤ 0.66	≥ 0.67

LABELING TOLERANCES

- Product shall contain both an ENERGY STAR and NFRC temporary label
 - Rating values match the designated zone
 - NFRC Certified Product

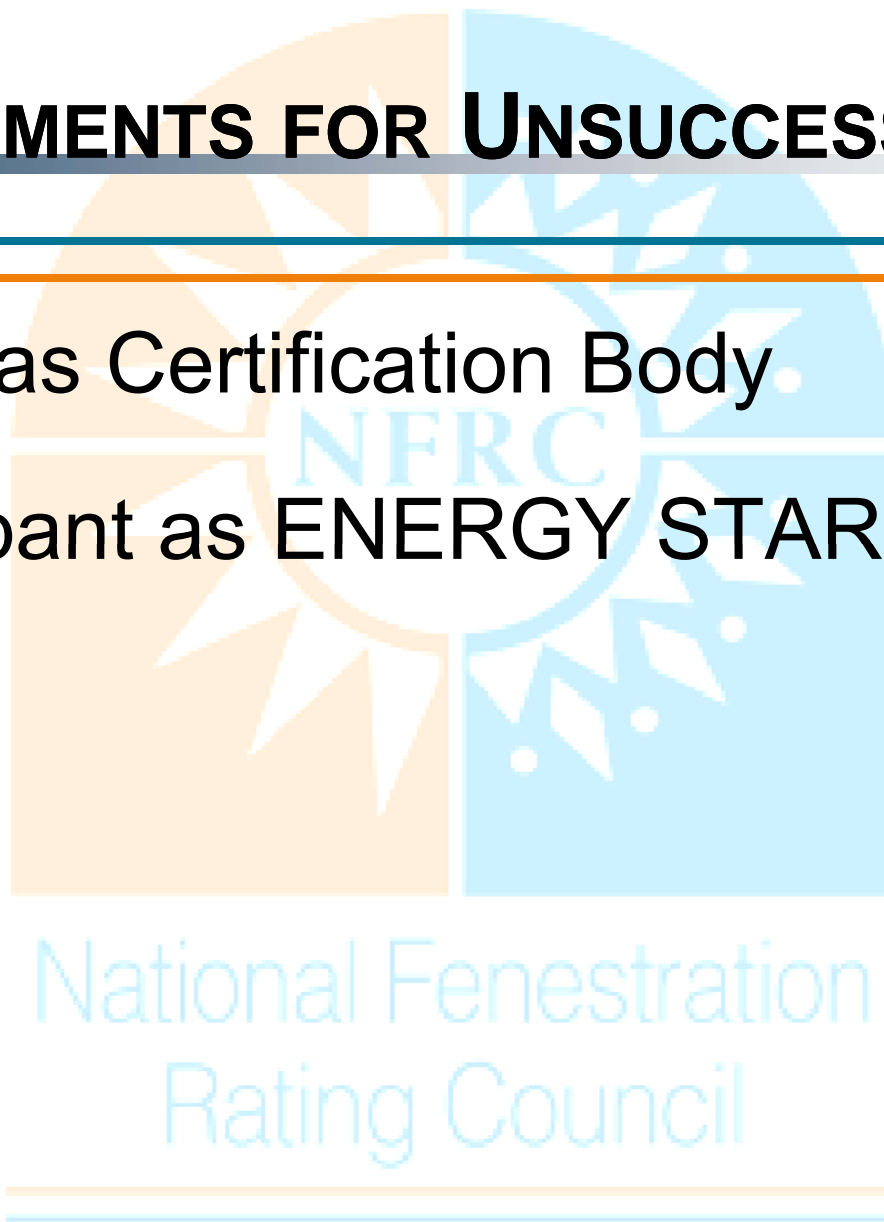
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LABELING REQUIREMENT EXAMPLE

- ENERGY STAR qualified product line
 - Contains 100 individual product options.
 - 50 of the individual product options qualify for ENERGY STAR in at least one climate zone.
 - When manufactured, those 50 individual product options **must always** be labeled as an ENERGY STAR product for the proper climate zone.
-
-

REQUIREMENTS FOR UNSUCCESSFUL TEST

- NFRC as Certification Body.
- Participant as ENERGY STAR Partner

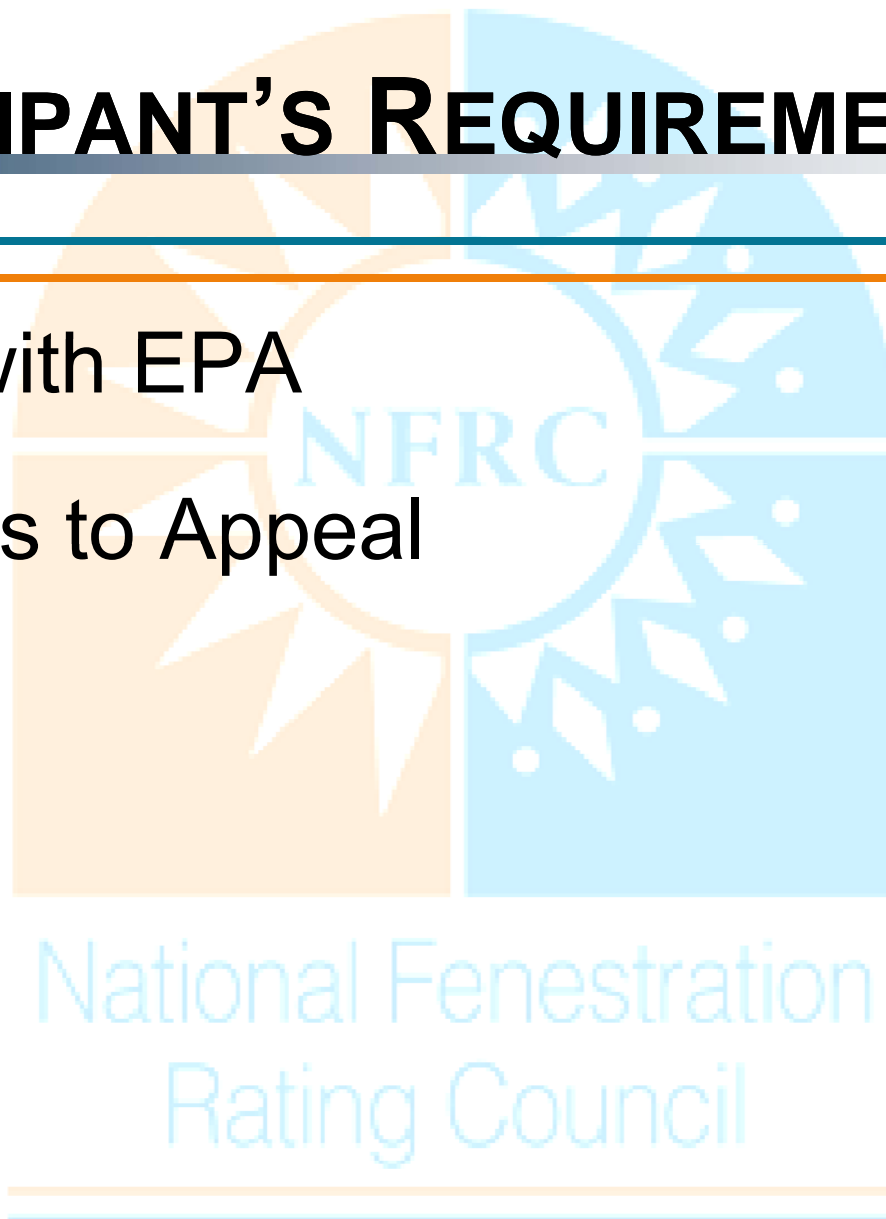


NFRC REQUIREMENTS

- Within 2 days of determining and unsuccessful test, for both energy performance and labeling grades, NFRC will provide to the EPA a report and recommended corrective action.
 - NFRC will provide to the Participant:
 - A successful Notice of Verification; or
 - A Notice of Non-compliance
-
-

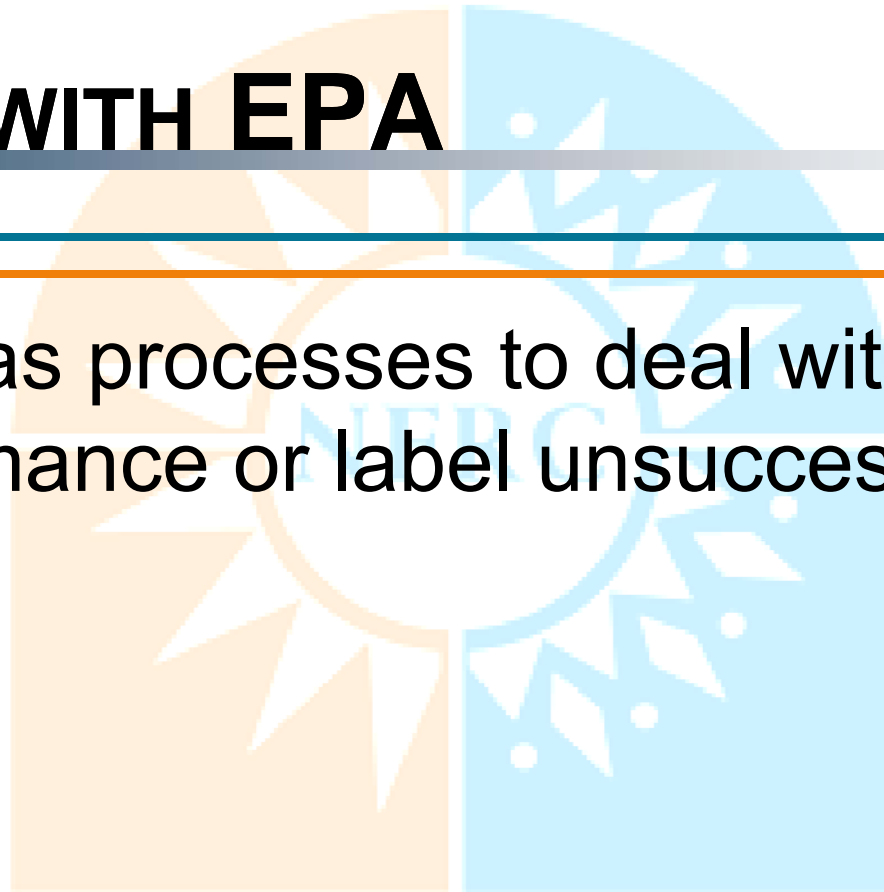
PARTICIPANT'S REQUIREMENTS

- Work with EPA
- Process to Appeal



WORK WITH EPA

- EPA has processes to deal with a energy performance or label unsuccessful test



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PROCESS TO APPEAL

- Participant may appeal the results of the grade within 15 days.
- Discussed by the Verification Policy Committee (VPC)
- NFRC Executive Committee provides final decision



QUESTIONS AND ANSWERS SESSION

Thank You!

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