

Raising the Bar in Home Performance: Quality Assurance with BPI Credentials

NASEO Buildings Committee
August 29, 2013

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Building Performance Institute



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***This home is
90 years old
and has never
had a physical***

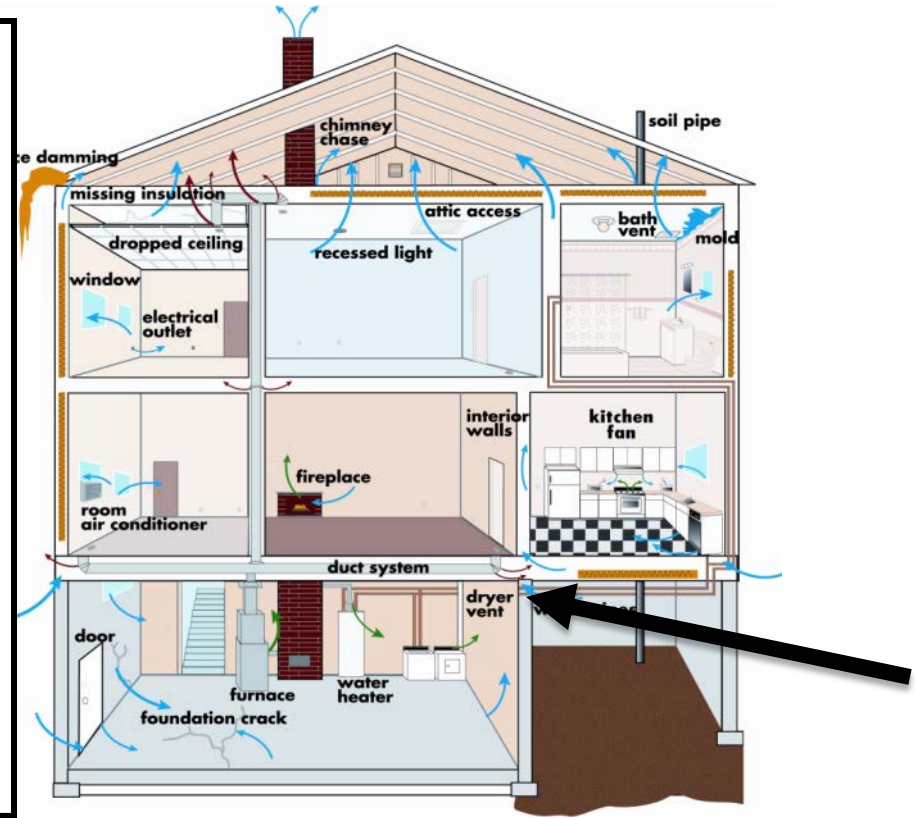


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Typical home...full of systems...

Key Question:
Do you know
where your
fresh air comes
from?



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Unsealed Rim Joists



**Uninsulated Ducts
in Crawl Space**



**Mold on
Walls**



**Open
Sump
Pit**



Visitors



**Corrosion on
Hot Water Tank**



**Dirty Furnace
Filters**



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Why We Care: 130 million reasons for Home Energy Upgrade Contracting

- About 1/3 of owner-occupied homes are **45+ years old**
- Another 1/3 is **between 25 and 45** years old
- About 1/3 are newer than 25 years – built with building codes—if adopted
- 2/3 of homes built before modern energy codes
 - Drafty, uncomfortable and expensive to operate
 - Old equipment in need of upgrades
 - Occupants sensitive to indoor air quality problems



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BPI is

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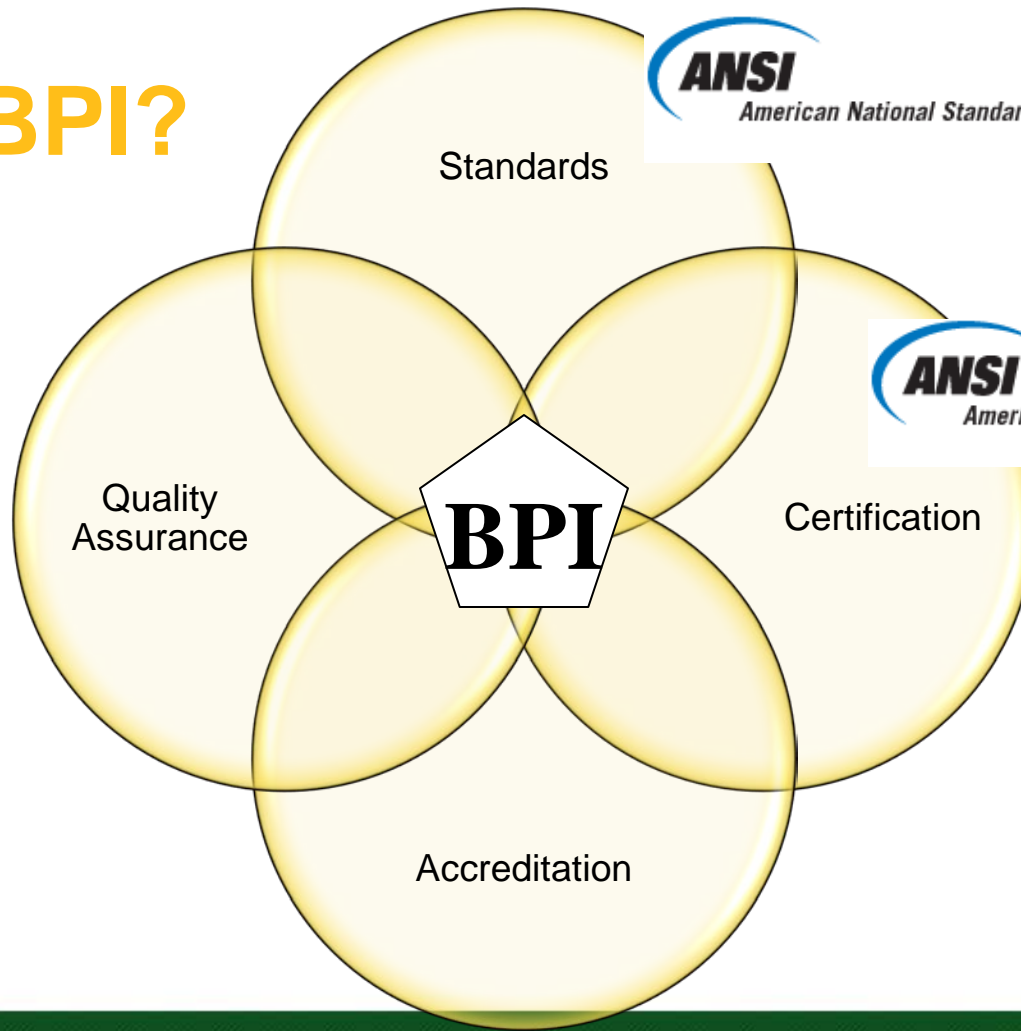
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What is BPI?



July 2010

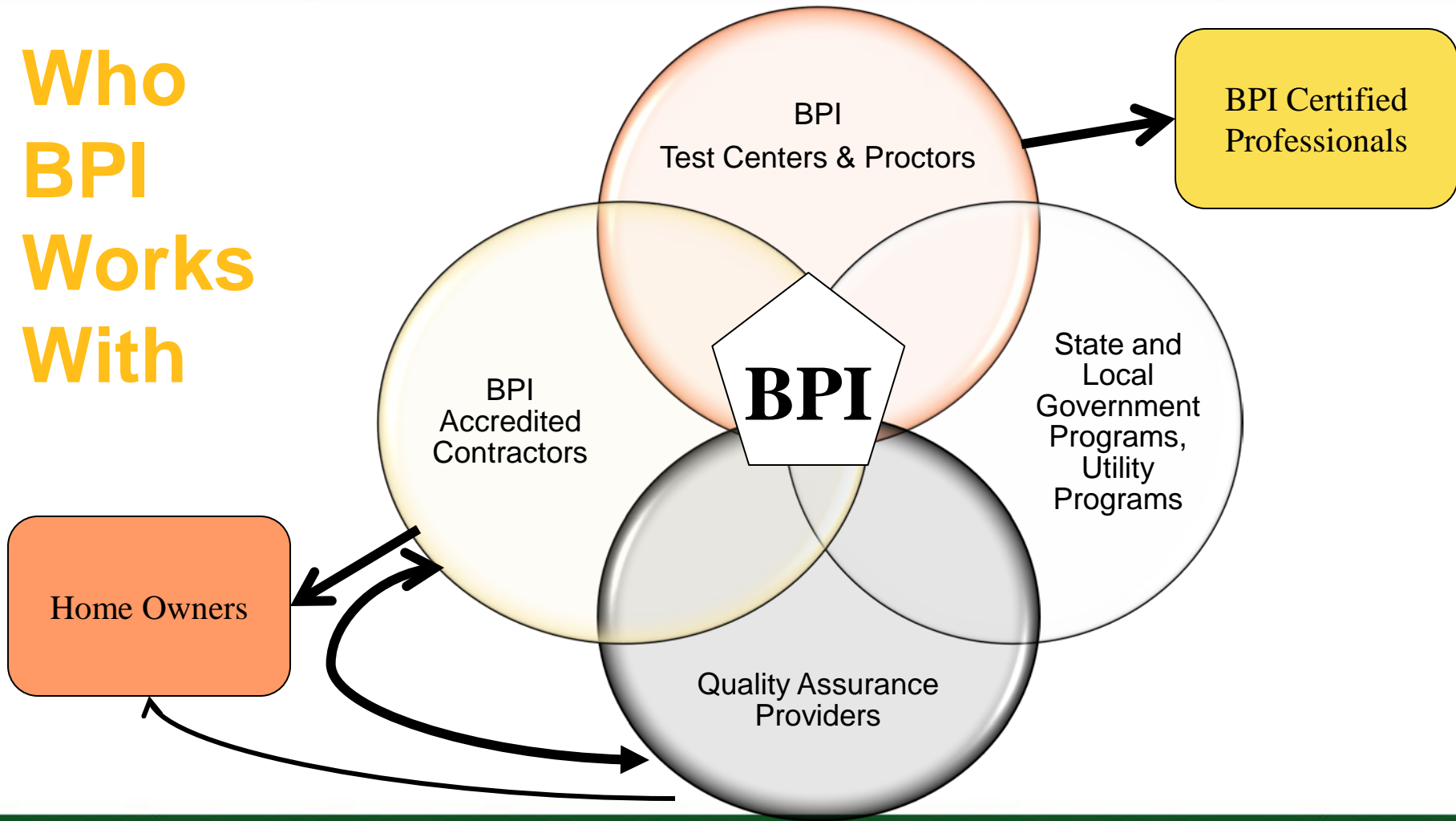
August 2012



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Who BPI Works With

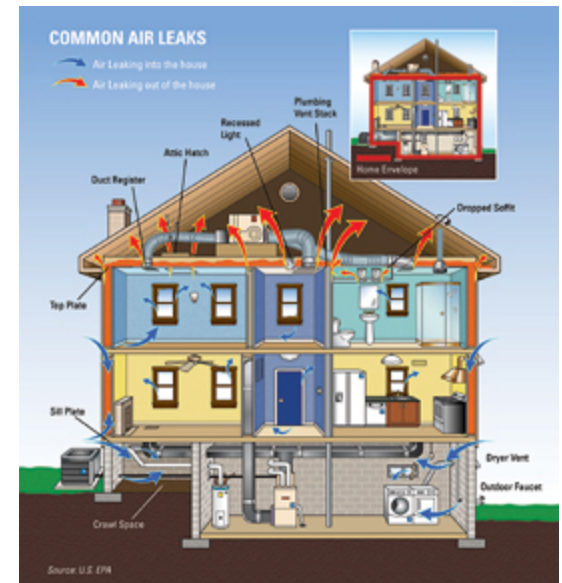


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What is Home Performance?

The whole house approach to improving the comfort, health, safety, energy efficiency and durability of your customers' homes.



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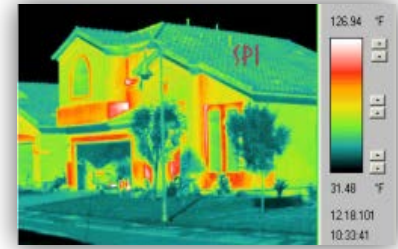
BPI's Core Certifications



Heating Professional



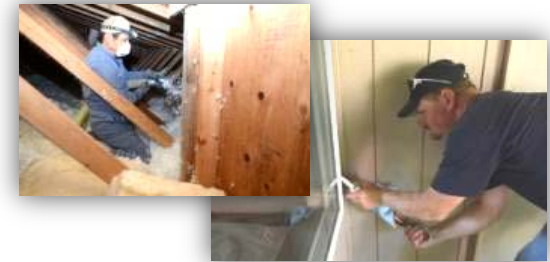
Building Analyst



Envelope Professional



Air Conditioning /Heat Pump Professional



Air Leakage Control Installer (RBE-WHALCI)

The BPI Motto:
*First and Last,
Do No Harm*
Test-in and Test-out



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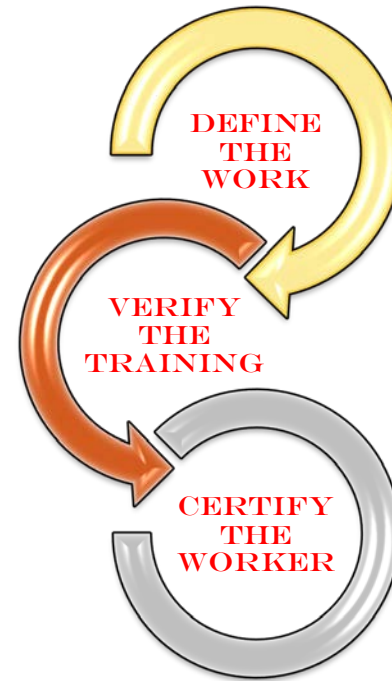
Building a Career Ladder



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DOE's Guidelines for Home Energy Professionals Project

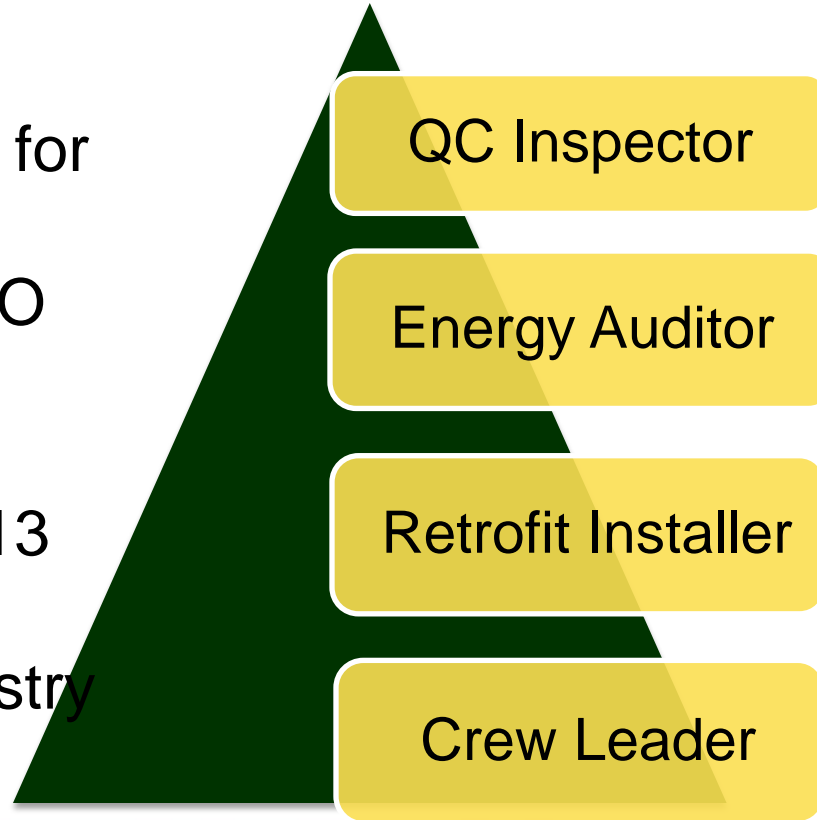


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Four Home Energy Professional (HEP) Certifications

- Advanced credentials for experienced workers
- ANSI accredited to ISO 17024 standard
- Pilot exam program completed in April 2013
- Focused on most important jobs in industry



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Why advanced credentials now?

Lack of access to skilled workers:

“Lack of trained workers capable of performing to nationally recognized standards of work consistent with customer expectations - -- Recovery Through Retrofit, Oct 2009



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American National Standards Institute

- Internationally recognized
- Accredits to the ISO 17024 standard – global benchmark for personnel certifications
- Only certification standard recognized by the federal government
- Provides quality assurance to programs, employers and consumers by providing recognizable credential for judging competency



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What makes the HEP certs advanced?

Demonstrate advanced competency through:

- Work experience prerequisites
 - Building science training
 - Industry certifications (BPI, RESNET, NATE, EPA)
- Passing written and field exams administered by participating BPI Test Centers.



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Energy Auditor

Evaluate the energy efficiency, health, and safety of a home, and use diagnostic equipment to identify areas for energy savings. Use modeling software to produce an audit report and develop a prioritized scope of work for the customer.



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Retrofit Installer



Ensure quality and compliance of proper installation/execution of products and services related to existing home energy efficiency. Install residential envelope air sealing, HV/AC duct sealing, minor lighting upgrades, and basic home repairs.



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Crew Leader

Ensure quality and supervise the installation and performance of weatherization measures defined in each project's work scope developed during the auditing/estimating process.



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Quality Control Inspector

Verify compliance of retrofit work performed based on work plans and standards. Use diagnostic equipment to conduct audits and inspections, and develop reports that specify corrective actions to achieve optimal whole house home performance.



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What's In It For Me?



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Benefits for Programs

- Take the guesswork out of specifying credentials
- Identify and retain capable contractors through HEP certification
- Set uniform expectations for work through SWSs.
- Ensure top quality work for homeowners
- Show measurable results for rate payers/ tax payers
- Reduce risk of liability
- Reduce program costs
- Improve service delivery



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Benefits for Workers

- Differentiate from the competition
- Job security
- New job opportunities
- Higher level of professionalism



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Benefits for Employers

Higher-quality workers doing better work leads to:

- Improved customer satisfaction
- Increased profits and reduced costs due to:
 - Reduced call backs
 - Fewer emergency replacements
- More referrals – drive new business by building consumer trust



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Additional Benefits for Employers

- A skilled employee base can increase:
 - Productivity by 230%
 - Retention by 70%
- A skilled employee base equals a 7,000% return on investment for employers from improvements in:
 - Accuracy
 - Work safety practice
 - Customer service
 - Time management

*From the National Skill Standards Board: *Benefits of Skilled Workforce*, 2010



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What happens to BPI's current certs?

- HEP certifications not replacing BPI's existing certifications in the industry.
- Will complement and build upon BPI's existing certs in the home performance career ladder.
- Program managers may choose to phase in specifying HEP certs over 3 year period (as core certifications come up for renewal)



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HEP Certifications on the Web

www.bpi.org/HEP

Find resources:

- Application
- Prerequisite Criteria
- Pilot Certification Scheme Handbook



The screenshot shows the BPI website's main content area. At the top, there is a navigation bar with links for Home, Locator, Contact Us, Login, Documents, News, and Our Team. Below this is a secondary navigation bar with categories: WHAT WE DO, CERTIFIED PROFESSIONALS, ACCREDITED COMPANIES, BPI STANDARDS, PROGRAM SERVICES, HOME OWNERS, GREEN JOB CONNECTION, BPI TEST CENTERS, and TRAINING & EDUCATION. The main content area features a large heading: "Take Your Career to the Next Level with Home Energy Professional Certifications". Below the heading is a paragraph of text explaining the value of HEP certifications. To the right of the text is a "Frequently asked questions" section with a question mark icon and a "WATCH VIDEO NOW" button. Below the text is a "View BPI's recorded webinar introducing the new certifications" section with a "WATCH VIDEO NOW" button. On the right side of the page, there is a search bar, a "Find a participating BPI Test Center" section with a "See Participant List" button, and a photo of a technician working on a furnace. The photo is credited to "Photo courtesy of ABC Cooling & Heating".



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Thank You

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