



Date Distributed: February 9, 2010

**THE
NATIONAL
BOARD**
OF BOILER AND
PRESSURE VESSEL
INSPECTORS

**SUBCOMMITTEE
ON INSTALLATION**
MINUTES

*Meeting of January 20, 2010
Austin, Texas*

*These minutes are subject to approval and are for Subcommittee use only.
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The National Board of Boiler & Pressure Vessel Inspectors
1055 Crupper Avenue
Columbus, Ohio 43229-1183
Phone: (614)888-8320
FAX: (614)847-1828

1. **Call to Order**

The meeting was called to order at 8:00 a.m. by Chairman Mike Richards.

2. **Announcements**

- a. The National Board will host a reception on January 20 from 6:30- 8:30 p.m. in the Atrium of the Omni Hotel.
- b. A Continental breakfast and luncheon will be hosted by the National Board on January 21.

3. **Adoption of Agenda**

There was a motion to adopt the agenda. The motion was unanimously approved.

4. **Approval of Minutes of July 2009**

There was a motion made to approve the July 2009 minutes. The motion was unanimously approved.

5. **Review of the Roster (Attachment 1)**

The attendees, members, alternates and guests are identified on Attachment 1.

6. **Action Items**

NB06-0306 Part 1 3.8.3.1 SG on Boilers Address combustion controls for fired boilers. Reference item NB02-2502. CSD-1 and Section IV are working jointly on controls and safety devices. There were plans to publish in 2008. (No Attachment)

A progress report was given by Mr. Bob Cate, Alternate for B. Moore.

NB07-0905 Part 2 4.3.1-4.3.3 SC Inspection Review these section for completeness and consistency in pressure testing. Mr. Cook suggested forming a task group from all three parts. A task group of G. Galanes (Chair), D. Parrish, M. Horbaczewski, and J. Yagen has been assigned. (No Attachment)

A progress report was given by Mr. Stan Konopacki.

NB07-1208 Part 1 Glossary (SG Boilers and PVP) Expand on the glossary for Part I Installation. A task group of B. Moore (Chair), C. Hopkins, P. Bourgeois and R. Snyder has been assigned (Attachment 2)

A motion was made to move the definition of thermal fluid heaters (Attachment 2) presented by Mr. Gary Scribner to NB07-1208 Part 1 Glossary (SG Boilers and PVP) and was unanimously approved. Mr. Steve Torkildson will also work on a definition of "Solar Boiler".

NB08-0320 Part 1.4.3 SC on Installation This action item is a result of a request from the Federal Railroad Administration. Add a new paragraph in 4.3 General Requirements to address change of service for a pressure vessel. These requirements should caution installers, inspectors, owners and jurisdictional authorities of the inherent dangers involved when changing service. A new supplement should be added to address the specific requirements for installation of pressure

vessels that are being converted from one service to another. A task group has been formed from all three parts of the NBIC led by Mr. Robert Wielgoszinski.

A progress report was given by Mr. Robert Wielgoszinski and Mr. Gary Scribner.

NB08-2101 Part 1 SG on Boilers CSD-1 does not address solid fuel firing and it would be appropriate for the NBIC to look at it. A task group of G. Halley (Chair), M. Richards, D. Pranghoffer and B. Moore were assigned. (No Attachment)

A progress report was given by Mr. Geoff Halley.

NB09-0204 Part 1 SG on Boilers Address water heaters other than fired storage units (new technology). (No Attachment)

A progress report was given by Mr. Gary Scribner.

NB09-0501 Part 1 SG on PVP Add the appropriate rules to Part 1 to ensure that Installation rules address the same requirements for pressure vessels and controls as will later be required for Inservice Inspection. A task group of G. Scribner (Chair), J. Yagen, and R. Snyder has been assigned. (No Attachment)

A progress report was given by Mr. Gary Scribner.

NB09-0601 Part 1 2.2 SG on PVP This action is a result of PR07-2102 which lead to NB07-1212. Change the definition of power boilers to exclude thermal fluid heaters. A task group of G. Scribner (Chairman), P. Bourgeois, and R. Sulzer have been assigned. (See Attachment 3 pgs 1-2)

A motion was made to approve the language in Attachment 3 pgs. 1-2 and the motion was unanimously approved.

NB10-0201 Part 1 S3 SG on PVP Expand the section on installation of thermal fluid heaters. This action item is a result of splitting NB09-0601 into two parts. A task group of J. Yagen, G. Halley, P. Bourgeois and R. Sultzer has been assigned. (No Attachments)

A progress report was given by Mr. Mike Richards. Ms. Melissa Wadkinson was added to the task group.

NB10-0202 Part 1 SG on Boilers Address solar fired boilers. A task group of Mr. Steve Torkildson (Chair), M. Richards, G. Scribner, S. Konopacki and J. Yagen, D. Cook and R. Pulliam has been assigned. (No Attachment)

A progress report was given. The task group will continue to work on this for the July meeting.

7. New Business

NB10-1201 Part 1 Request for a format change to NBIC, Part 1 Code Rules.

A report was given by Mr. Gary Scribner.

8. Future Meetings

July 2010, Columbus, Ohio
January 2011, Austin Texas

9. Adjournment

The meeting was adjourned at 11:00 AM

Respectfully Submitted,

James McGimpsey
Secretary

ATTACHMENT 1

Attendance List SC on Installation

Meeting Date: January 20, 2010

<p>H. Michael Richards Southern Company 42 Inverness Center Pkwy. Birmingham, AL 35242</p> <p>Ph: 205-992-7111 Fax: 205-992-5372 0381 E-mail: hmrichar@southernco.com</p>	<p>Attended: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p><i>HR</i> Initial</p>	<p>Geoff Halley ABMA 1315 Ridge Road Wildwood, MO 63021</p> <p>Ph: 636-394-3483 Fax: 636-527-2839 E-mail: geoff@abma.com</p>	<p>Attended: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p><i>GH</i> Initial</p>
<p>Craig Hopkins Seattle Boiler Works 500 South Myrtle Street Seattle, WA 98108</p> <p>Ph: 206-762-0737 Fax: 206-762-3516 E-mail: chopkins@seattleboiler.com</p>	<p>Attended: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p><i>CH</i> Initial</p>	<p>H. Neal Titer MIRANT Mid-Atlantic Systems Engineering 1400 N. Royal Street Alexandria, VA 22314</p> <p>Ph: 703-838-7810 Fax: 703-838-8287 E-mail: neal.titer@mirant.com</p>	<p>Attended: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p><i>JRM</i> Initial</p>
<p>James McGimpsey The National Board of B&PVI 1055 Crupper Ave. Columbus, OH 43229</p> <p>Ph; 614-888-8320 Fax: 614-847-1828 Email: jmcmgimpsey@nationalboard.org</p>	<p>Attended: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p><i>JM</i> Initial</p>	<p>Jim Yagen Dynegy, Inc. 2828 N. Monroe Street Decatur, IL 62526</p> <p>Ph: 217-876-3935 Fax: 217-876-7475 E-mail: jim_yagen@dynegy.com</p>	<p>Attended: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p><i>JRM</i> Initial</p>
<p>Raymond Snyder 150 Costa Loop Auburndale, FL 33823</p> <p>Ph: 865-965-4417 Fax: 865-967-0185 E-mail: Raymond.snyder@ariseinc.com</p>	<p>Attended: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p><i>RS</i> Initial</p>	<p>Gary Scribner Missouri Division of Fire Safety P.O. Box 844 Jefferson City, MO 65102</p> <p>Ph: 573-751-8708 Fax: 573-526-5971 E-mail: gary.scribner@dfs.mo.gov</p>	<p>Attended: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p><i>GS</i> Initial</p>
<p>Paul Bourgeois Travelers 11441 Sarasota Lane Northport, AL 35475</p> <p>P: 205-339-6314 F: 888-803-1522 E-mail: pcbouрге@travelers.com</p>	<p>Attended: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p><i>PB</i> Initial</p>	<p>Ron C. Sulzer The Babcock & Wilcox Company 5955 Grovewood Drive Mentor, OH 44060</p> <p>Ph: 440-228-6000 Fax: 440-257-3267 E-mail: crsulzer@sbcglobal.net</p>	<p>Attended: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p><i>JRM</i> Initial</p>

Attendance List SC on Installation

Meeting Date: **January 20, 2010**

<p>Brian Moore Hartford Steam Boiler One State Street P.O. Box 5024 Hartford, CT 06102-5024 Ph: 860-722-5657 Fax: 860-722-5530 E-mail: brian.moore@hsb.com</p> <p><i>BOB CATE</i></p>	<p>Attended: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p><i>PO</i> <hr/> Initial</p>	<p>Stanley Konopacki Midwest Generation 401 E. Greenwald Ave. Waukegan, IL 60087 P: 847-599-²²⁴³2244 F: 847-599-2252 E-mail: SKonopacki@MWGen.com</p> <p><i>SKK</i> <hr/> Initial</p>	<p>Attended: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>Harold Tyndall Zurich Services Corporation Risk Engineering 770 Corbett Street Winterville, NC 28590 Ph: 252-215-1144 Fax: E-mail: Harold.tyndall@zurichna.com</p>	<p>Attended: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p><i>HGT</i> <hr/> Initial</p>		<p>Attended: Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p><hr/> Initial</p>
<p><i>BOB CATE</i> ZURICH 13970 OAK PLACER. BATON ROUGE, LA 70818 PH. 225-262-4424 <i>bob.cate@zurichna.com</i></p>	<p><i>PO</i></p>		
<p><i>STEVE TORKILDSON</i> ESOLAR 130 W UNION ST PASADENA CA 91103 626-685-4961 <i>STEVE.TORKILDSON@ESOLAR.COM</i></p>	<p><i>ST</i></p>		

ATTACHMENT 2

NB07-1208

Task Group Assignment:

Expand on the Glossary for Part 1 Installation

Source:

Add the definition of the thermal fluid heater to the Glossary.

Definition

A thermal fluid heater is a closed vessel in which a synthetic or organic fluid is heated for use external to itself, by the direct application of energy from the combustion of fuels or from electrical or solar energy.

NBIC – NB09-0601

POWER BOILER

Part 1 – Section 2

Current Definition

Proposed Text

2.2 DEFINITIONS

2.2 DEFINITIONS

A power boiler is a closed vessel in which water or other liquid is heated, steam or vapor generated, steam or vapor is superheated, or any combination thereof, under pressure for use external to itself, by the direct application of energy from the combustion of fuels or from electricity or solar energy. (The term boiler includes fired units for heating or vaporizing liquids other than water, but does not include fired process heaters and systems.) The term boiler also shall include the apparatus used to generate heat and all controls and safety devices associated with such apparatus or the closed vessel.

A ^{power} boiler is a closed vessel in which water or other liquid is heated, steam or vapor generated, steam or vapor is superheated, or any combination thereof, under pressure for use external to itself, by the direct application of energy from the combustion of fuels or from electricity or solar energy. (The term boiler includes fired units for heating or vaporizing liquids other than water, but does not include fired process heaters and systems.) The term boiler also shall include the apparatus used to generate heat and all controls and safety devices associated with such apparatus or the closed vessel.

a) **Power Boiler**
A boiler in which steam or other vapor is generated at a pressure in excess of 15 psig (100 kPa) for use external to itself.

a) **Power Boiler**
A boiler in which steam or other vapor is generated at a pressure in excess of 15 psig (100 kPa) for use external to itself.

A07 b) **High-Temperature Water Boiler**
A boiler in which water is heated and operates at a pressure in excess of 160 psig (1.1 MPa) and/or temperature in excess of 250 ° F. (121° C). °

A07 b) **High-Temperature Water Boiler**
A boiler in which water is heated and operates at a pressure in excess of 160 psig (1.1 MPa) and/or temperature in excess of 250 ° F. (121° C). °

NB09-0601

PART PG

GENERAL REQUIREMENTS FOR ALL METHODS OF CONSTRUCTION

GENERAL

PG-1 SCOPE

The requirements of Part PG apply to power boilers and high pressure, high-temperature water boilers and to parts and appurtenances thereto and shall be used in conjunction with the specific requirements in the applicable Parts of this Section that pertain to the methods of construction used.

PG-2 SERVICE LIMITATIONS

PG-2.1 The rules of this Section are applicable to the following services:

07 (a) boilers in which steam or other vapor is generated at a pressure of more than 15 psig (100 kPa) for use external to itself

(b) high-temperature water boilers intended for operation at pressures exceeding 160 psig (1.1 MPa) and/or temperatures exceeding 250°F (120°C)

★ PG-2.2 For services below those specified in PG-2.1 it is intended that rules of Section IV apply; however, boilers for such services may be constructed and stamped in accordance with this Section provided all applicable requirements are met.

PG-2.3 Coil-type hot water boilers where the water can flash into steam when released directly to the atmosphere through a manually operated nozzle may be exempted from the rules of this Section provided the following conditions are met:

(a) There is no drum, header, or other steam space.

(b) No steam is generated within the coil.

(c) Tubing outside diameter does not exceed 1 in. (25 mm).

(d) Pipe size does not exceed NPS $\frac{3}{4}$ (DN 20).

(e) Nominal water capacity does not exceed 6 gal (23 L).

(f) Water temperature does not exceed 350°F (175°C).

A09 (g) Adequate pressure relief valves and controls are provided.

★ PG-2.4 The rules of this Section are not intended to apply to thermal fluid heaters in which a fluid other than water is heated by the application of heat resulting from the combustion of solid, liquid, or gaseous fuel but in which no vaporization of the fluid takes place; however, such thermal fluid heaters may be constructed and stamped in accordance with this Section, provided all applicable requirements are met. A08

PG-3 REFERENCED STANDARDS

Specific editions of standards referenced in this Section are shown in A-360.

PG-4 UNITS

Either U.S. Customary, SI, or any local customary units may be used to demonstrate compliance with all requirements of this edition (e.g., materials, design, fabrication, examination, inspection, testing, certification, and over-pressure protection).

In general, it is expected that a single system of units shall be used for all aspects of design except where unfeasible or impractical. When components are manufactured at different locations where local customary units are different than those used for the general design, the local units may be used for the design and documentation of that component. Similarly, for proprietary components or those uniquely associated with a system of units different than that used for the general design, the alternate units may be used for the design and documentation of that component.

For any single equation, all variables shall be expressed in a single system of units. When separate equations are provided for U.S. Customary and SI units, those equations must be executed using variables in the units associated with the specific equation. Data expressed in other units shall be converted to U.S. Customary or SI units for use in these equations. The result obtained from execution of these equations may be converted to other units.