



21 May 2007

**Report of the Twentieth Meeting  
ISO/TC 192 – Gas Turbines  
17 May 2007  
Montreal, Quebec  
Canada**

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**1. Opening of the Meeting (09:00)**

The Chair, Roy Allen, opened the meeting and welcomed the delegates to Montreal, Quebec, Canada. The Secretary, Ryan Crane was unable to attend this meeting and Jack Karian was assigned by ASME Staff to attend instead.

**2. Roll Call of Delegates**

The delegates and guests introduced themselves.

**Attendance**

Roy Allen, Chairman	USA
Jack Karian, Secretariat	USA
BJC (unable to read sign-in)	Switzerland
Lars Ellmark	Sweden
Anthony Eynstene	UK
Zhenping Feng	China
Roland Hunt	UK
Koichi Ito	Japan
Tom Lazet	USA
Shinti Muramatsu	Japan
Tuichiro Sugiyama	Japan
Peter Rainer	UK
Shigekazu Uji	Japan
Hans Wettstein	Switzerland
Koji Yasuda	Japan

A signed attendance list is attached to this meeting report.

**3. Introduction by the Chairman**

Mr. Allen commented that ISO is very concerned about not meeting completion schedules. Not meeting the completion dates creates procedural problem, in some cases it requiring the item to be reissued. He urged that the working groups make every effort to meet their work assignments by the scheduled dates.

**4. Adoption of the Agenda**

The final agenda, TC 192 N 249 (attached to this meeting report) was unanimously adopted.

**5. Appointment of the Drafting Committee**

As the TC 192 volunteered to draft the resolutions, no official drafting committee was appointed. Peter Rainer and Roy Allen volunteered to assist Jack Karian with the resolutions.

**6. Report of the Secretariat**

The Report of the Secretariat (TC 192 N 250) was distributed prior to the meeting and was approved.

Resolution 175 – Unanimous

It was noted that Algeria was listed as a P member. None of the members recalled that a representative from Algeria had participated in any of the working groups. A request will be sent to the ISO to determine the reason for this addition to the membership.

**7. Reports of Working Groups**

**7.1 WG 3 - Combined cycles (Secretariat: NEN) - R. van Heijl**

This activity was disbanded at the last meeting.

**7.2 WG 4 - Joint TC 192-TC 62/SC 6 WG – Gas turbine use (Secretariat: DIN) - K. Parczyk**

**7.2.1 3977-3 - Gas turbines - Procurement - Part 3: Design requirements**  
ISO 3977-3:2004 was published 2004-08-15.

**7.2.2 3977-7 - Gas turbines - Procurement - Part 7: Technical information**  
ISO 3977-7:2002 published 2002-07-01.

**7.2.3 3977-8 - Gas turbines - Procurement - Part 8: Inspection, testing, installation and commissioning**  
ISO 3977-8:2002 published 2002-07-01.

**7.3 WG 7 - Fuels, environment (Secretariat: ANSI) - B. Rising**

**7.3.1 3977-4 - Gas turbines - Procurement - Part 4: Fuels and environment**  
ISO 3977-4:2002 published 2002-06-01.

It was noted that this standard needs to be reaffirmed soon. Mr. Rainer said that some minor comments were received from BSI and response date of 27 July was indicated.

**7.4 WG 8 – Trend monitoring systems for gas turbine installations**  
**(Secretariat: DIN) - K. Parczyk**

**7.4.1 19860 - Gas turbines - Trend monitoring systems for gas turbine installations**  
ISO 19860:2005 was published 2005-03-15.

**7.5 WG 9 – Electric power applications (Secretariat: BSI) – R. Wheadon**

**7.5.1 19859 - Requirements for the procurement of gas turbines for electric power**

At the last meeting, in Barcelona, the re-establishment of new work item proposal ISO/NP 19859 was balloted as N238 and approved as N240.

At this meeting, it was noted that nothing has been done on this new work item. If there is no activity planned, then consideration should be given to dropping the activity

**7.6 WG 10 – Gas turbine safety (Secretariat: BSI) - R. Stanton**

**7.6.1 21789 - Gas turbine applications - Safety**

Mr. Rainer reported that Mr. Stanton was physically unable to travel to attend this meeting. He said that substantial progress was made at a meeting last month – numerous comments, some 70 pages of several hundred comments had been submitted to DIS21789. Most of them had been reviewed. The majority of them were not of a technical nature. The working group is hoping to complete their review of the comments at the scheduled June 14-15 meeting in London. One of the major technical issues is risk analysis with 2 differing approaches. It needs to be resolved.

Also, see the attached Convenor's report, 2006-2007, dated 08 May 2007.

**7.7 WG 11 – Acceptance tests (Secretariat: DIN) – J. Zachary (ANSI)**

**8.7.1 Revision of ISO 2314 – Gas turbines – Acceptance tests**

The ballot for the committee draft (N 237), ISO/CD 21789.3, was approved as N 241.

Mr. Zachary had submitted the revised CD of ISO 2314 to VDMA for preparation as a DIS

**7.8 WG 12 – Microturbines (Secretariat: BSI) - A. Eynstone**

**7.8.1 19372 – Requirements for microturbines used in power generation or combined heat and power applications**

Mr. Eynstone reported that the WG 13 worked all day yesterday reviewing some 40 pages of a draft that he had prepared. He said that he hoped to complete the CD by 18/1/2008. The other target dates are:

DIS 31/7/2008

FDIS 31/7/31/2009

IS 31/1/2010

**7.9 WG 13 – Cogeneration Systems (Secretariat: JISC) -**

**7.9.1 26382 – Cogeneration systems – Technical declarations for planning**

Dr. K. Ito reported that WG 13 met on Tuesday. This was their 3<sup>rd</sup> meeting and they are planning to meet again in December. He said that the CD should be ready next month. They are working on resolving comments. They agreed to revise the title of 26382 by adding “evaluation and procurement”

The following target dates were established:

CD by 30 June 2007

DIS 28/2/2008

FDIS /28/2/2009

IS 30/9/2009

**8. New Work Item Proposals**

None.

**9. Items for Future Work**

None.

**10. ISO/TC 192 Policy Matters**

None.

**11. Other Business**

Resignation

Mr. Allen declared that this would be his last meeting. Although his term had expired last year he continued in this capacity for another year. He said that he had been involved with TC 192 for the past 18 years and even longer with PTC 22, Performance Test Codes on Gas Turbines, since 1971. He had resigned his Chairmanship of PTC 22, although he will continue as a member of that committee.

Jack Karian reported that ASME has informed ANSI (USA member body) of their intent to relinquish the Secretariat of TC 192.

**12. Future Meetings**

2008 June Berlin, Germany

ISO/TC 192 will meet on Thursday, 13 June 2008 in Berlin, Germany at 0900.  
Working groups who wish to meet will do so on the preceding Monday-Wednesday.

**13. Approval of resolutions**

Resolutions 175-182 were unanimously approved. They are attached.

**14. Adjournment**

Roy Allen adjourned the meeting at 1115 and thanked the delegates for their cooperation in completing the agenda.

Respectively submitted,

Jack Karian  
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**ISO/TC 192 MEETING**  
**ATTENDANCE LIST**

**17 May 2007**  
**Montreal, Canada**

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**ISO/TC 192 MEETING**  
**ATTENDANCE LIST**

**17 May 2007**  
**Montreal, Canada**

<b><u>NAME</u></b>	<b><u>COUNTRY</u></b>	<b><u>EMAIL</u></b>
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Jack Karian	USA - Secretariat	<i>Karianj@asme.org</i>

## RESOLUTIONS

- | <u>#</u> | <u>Resolution</u>   |
|----------|---|
| 175      | The report of the Secretariat N250 was approved. Secretariat to submit an inquiry to ISO regarding status of Algeria  |
| 176      | Secretariat to contact the Convenor of WG 9 on the status of 19859. If no work is being done or planned, then consideration should be given to dropping the activity. |
| 177      | WG 10 will meet on June 13-15 to resolve/review comments to the DIS. The target date for FDIS submittal is 1 <sup>st</sup> Q of 2008.                                 |
| 178      | The Convenor of WG11 submitted the revised CD (ISO 2314) to VDMA for preparation as a DIS.  |
| 179      | WG 12 completed a preliminary draft and is scheduled to complete the CD by 2008/1/18. Other target dates are DIS 2008/7/31, FDIS 2009/7/31 and IS 2010/1/31           |
| 180      | WG13 is scheduled to complete the CD by June 30, 2007. The other target dates are DIS 2008/2/28, FDIS 2009/2/28 and IS 2009/9/30                                      |
| 181      | ASME announced its intent to relinquish the Secretariat of TC 192. Other national bodies are invited to submit their interest to the ISO                              |
| 182      | The next date of the TC 192 meeting was scheduled for June 13, 2008 to be held in Berlin, Germany.  |

**Resolutions stand as submitted.**

**Adjourned.**



06 April 2007

**ISO/TC 192 – Montreal, Canada – 17 May 2007**  
**Agenda Item 6 –Report of the Secretariat – TC 192 Activities**

**1. Title – Gas Turbines**

**2. Officers**

Chair: Mr. Roy Allen  
Secretariat: Mr. Ryan L. Crane

**3. Scope**

Standardization in the field of all aspects of gas turbine design, application, installation, operation and maintenance, including simple turbine cycles, combined cycle systems, definitions, procurement, acceptance, performance environment (on the gas turbine itself and the external environment) and methods of test.

ISO/TC 192 is responsible for preparing horizontal standards for all types of gas turbines. Work on aero gas turbine engines shall be undertaken in liaison with those technique committees having the primary responsibility.

Note: ISO/TC 20 has the primary responsibility of preparing standards relative to the specific application of gas turbines in aerospace.

**4. ISO/TC 192 Membership**

Participating (P) Members (13)

Algeria (IANOR)  
China (SAC)  
France (AFNOR)  
Germany (DIN)  
Italy (UNI)  
Japan (JISC)  
Korea, Republic of (KATS)  
Netherlands (NEN)  
Russian Federation (GOST R)  
Sweden (SIS)  
Switzerland (SNV)  
United Kingdom (BSI)  
USA (ANSI)

Observer (O) Members (9)

Australia (SA)  
Belgium (NBN)  
Czech Republic (CNI)  
Hungary (MSZT)  
India (BIS)  
Mongolia (MASM)  
Norway (SN)  
Serbia (ISS)  
Spain (AENOR)

5. TC 192 Structure

<u>Working Group</u>	<u>Title</u>	<u>Secretariat/Convener</u>
<u>3</u>	<u>Combined cycles</u>	<u>NEN – Mr. R. van Heijl</u>

<u>4</u>	<u>Joint TC 192 – TC 67/SC 6 WG:Gas turbine use</u>	<u>DIN – Ms. K. Parczyk</u>
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**3977-3 - Gas turbines - Procurement - Part 3: Design requirements**

ISO 3977-3:2004 was published on 2004-08-15.

**3977-7 - Gas turbines - Procurement - Part 7: Technical information**

ISO 3977-7:2002 was published on 2002-07-01

**3977-8 - Gas turbines - Procurement - Part 8: Inspection, testing, installation and commissioning**

ISO 3977-8:2002 was published on 2002-07-01.

<u>7</u>	<u>Fuels, environment</u>	<u>ANSI – Mr. B. Rising</u>
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**3977-4 - Gas turbines - Procurement - Part 4: Fuels and environment**

ISO 3977-4:2002 was published on 2002-06-01.

<u>8</u>	<u>Trend monitoring systems for gas turbine installations</u>	<u>DIN – Ms. K. Parczyk</u>
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**19680 - Gas turbines - Trend monitoring systems for gas turbine installations**

ISO 19860:2005 was published on 2005-03-15.

<u>9</u>	<u>Electric power applications</u>	<u>BSI – Mr. R. Wheadon</u>
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**19859 - Requirements for the procurement of gas turbines for electric power**

Target Dates

CD: 2007-05-03

DIS: 2007-11-03

FDIS: 2008-11-03

IS: 2009-05-03



**6. Published ISO Standards Related to ISO/TC 192**

ISO 2314:1989	Gas turbines -- Acceptance tests for combined-cycle power plants
ISO 2314:1989/Cor 1:1997	
ISO 2314:1989/Amd 1:1997	
ISO 3977-1:1997	Gas turbines -- Procurement -- Part 1: General introduction and definitions
ISO 3977-2:1997	Gas turbines -- Procurement -- Part 2: Standard reference conditions and ratings
ISO 3977-3:2004	Gas turbines -- Procurement -- Part 3: Design Requirements
ISO 3977-4:2002	Gas turbines -- Procurement -- Part 4: Fuels and Environment
ISO 3977-5:2001	Gas turbines -- Procurement -- Part 5: Applications for petroleum and natural gas industries
ISO 3977-7:2002	Gas turbines -- Procurement -- Part 7: Technical Information
ISO 3977-8:2002	Gas turbines -- Procurement -- Part 8: Inspection, testing, installation and commissioning
ISO 3977-9:1999	Gas turbines -- Procurement -- Part 9: Reliability, availability, maintainability and safety
ISO 10494:1993	Gas turbines and gas turbine sets -- Measurement of emitted airborne noise -- Engineering/survey method
ISO 11042-1:1996	Gas turbines -- Exhaust gas emission -- Part 1: Measurement and evaluation
ISO 11042-2:1996	Gas turbines -- Exhaust gas emission -- Part 2: Automated emission monitoring
ISO 11086:1996	Gas turbines -- Vocabulary
ISO 19860:2005	Gas turbines -- Data acquisition and trend monitoring system requirements for gas turbine installations

**7. Past Meetings**

4-5 June 1997	Orlando, Florida, USA
4 June 1998	Stockholm, Sweden
9 June 1999	Indianapolis, IN, USA
10 May 2000	Munich, Germany
7 June 2001	New Orleans, LA, USA
6 June 2002	Amsterdam, The Netherlands
19 June 2003	Atlanta, Georgia, USA
14 June 2004	Vienna, Austria
06 June 2005	Reno, Nevada, USA
11 May 2006	Barcelona, Spain

**8. Future Meetings**

2008 June Berlin, Germany (ASME Turbo Expo 2008, 09-13 June 2008)

## ISO/TC 192 Document Register

Document Number	Title/Description	Distribution Date
TC192N92	Part 7 Japanese work item request for Emergency standby equipment in ISO 3977	1996-
TC192N93	Part 3 Basic requirements	
TC192N94	Part 4 Packaging and auxiliary equipment	
TC192N95	Part 7 Gas turbine applications	
TC192N93,94,95	Comments on 192 N 93, 94, and 95	
TC192N96	06-12/13 meeting agenda	
TC192N97	Secretariat report Agenda item 6.1	
TC192N92/Add 1	Report on Japanese proposal to add emergency standby equipment to Part 7 (A.I. 6.2)	
TC192N98	Report on CEN/CENELEC procurement guide (A.I.7)	
TC192N99	Concept for NP 3977 Part 11 (A.I.9.3)	
TC192N99/Add 1	Comments on 192 N 99	
TC192N100	1995 Annual Report	
TC192N101	Hotel information	
TC192N102	CD 3977-5 Controls	
TC192N103	1996-06-12/13 Birmingham meeting report	
TC192N104	June 1996 draft of prEN 45537	
TC192N105	Announcement of New ISO/TC 192 Secretariat	1996-10-03
TC192N106	Minutes of the Meeting of TC 192 – ISO/TC 67/SC 6/JWG 4, 10-11 June 1996, Birmingham, UK	1996-11-07
TC192N107	Minutes of the Meeting of TC 192 – ISO/TC 67/SC 6/JWG 4, 9-10 October 1996, Tokyo, Japan	1996-11-07
TC192N108	ISO Central Secretariat Announcement Regarding the Standards Production Process	1996-11-07
TC192N109	Report of the ISO/TC 192/WG 3 Meeting, 1996-11-14, Milan, Italy	1997-01-07
TC192 N 110	ISO/CD 3977-7, Gas Turbines, Procurement - Part 7: Technical Information	1997-01-29
TC192 N 111	ISO/CD 3977-8, Gas Turbines, Procurement - Part 8: Inspection, testing, installation and commissioning	1997-01-29
TC192 N 112	Minutes of the Meeting of ISO/TC 192 - ISO/TC 67/SC 6/JWG 4, Belfort, France, 10-11 December 1996	1997-01-29
TC192 N 113	Meeting Notice for the 2-5 June 1997 ISO/TC 192 Meetings	1997-02-14
TC192 N 114R	Draft Agenda for the 4-5 June 1997 ISO/TC 192 Meeting	1997-04-01
TC192 N 115	ISO/TC 192 Annual Report for 1996	1997-02-14
TC192 N 116	Report of the Secretariat to the 4-5 June 1997 ISO/TC 192 Meeting	1997-04-01
TC192 N 117	Contribution from the National Body of the Netherlands Regarding Corrections to ISO 2314:1989	1997-04-01
TC192 N 118	Status Report on ISO/TC 192/WG 3 Activities	1997-04-11
TC192 N 119	Report of the ISO/TC 192/WG 3 Meeting, Baden, 3-4 April 1997	1997-04-11
TC192 N 120	ISO/CD 3977-6, Gas Turbines – Procurement – Part 6: Combined Cycles	1997-05-24
TC192 N 121	Information Concerning Development of EC Directive on Exhaust Emissions from Gas Turbines	1997-06-09
TC 192 N 122	Meeting Report and Resolutions of the 4 June 1997 TC 192 Meeting, Orlando, FL	1997-08-29
TC 192 N 123	ISO/CD 3977-4, Gas Turbines - Procurement – Part 4: Fuels and Environment	1997-08-29
TC 192 N 124	Report of the ISO/TC 192/WG 3 Meeting, 23-24 October 1997, Swindon	1998-03-02
TC 192 N 125	Disposition of Comments Report on ISO/TC 192 N 120, ISO/CD 3977-6, Gas Turbines – Procurement – Part 6: Combined Cycles	1998-03-02
TC 192 N 126	NWI Proposal on Determination of the heat input into the HRSG, New Annex to ISO 2314: 1989	1998-03-02
TC 192 N 126R	NWI Proposal on Determination of the heat input into the HRSG, New Amendment to ISO 2314	1998-07-24
TC 192 N 127	NWI Proposal on Optimization/Balancing of simple/combined cycle operation, new Annex to ISO 2314:1989	1998-03-02
TC 192 N 127R	NWI Item Proposal on Optimisation/Balancing of simple/combined cycle operation, New Amendment to ISO 2314	1998-07-24
TC 192 N 128	NWI Proposal on HRSG with Catalysts – ISO Part 6 (Amendment or new Annex)	1998-03-02
TC 192 N 128R	New Work Item Proposal on HRSG with Catalysts, (Amendment to ISO Part 6)	1998-07-24
TC 192 N 129	Notice for the ISO/TC 192 Plenary Meeting, 4 June 1998, Stockholm, Sweden	1998-03-02
TC 192 N 130	Draft Agenda for the ISO/TC 192 Plenary Meeting, 4 June 1998, Stockholm, Sweden	1998-03-02
TC 192 N 131	ISO/TC 192 Annual Report – 1997	1998-03-25
TC 192 N 132	Report of the Secretariat to the 4 June 1998 ISO/TC 192 Meeting, Stockholm, Sweden	1998-04-23
TC 192 N 133	ISO/CD 3977-4.2, Gas Turbines – Procurement – Part 4: Fuels and Environment	1998-05-15
TC 192 N 134	Status Report of TC 192/WG 3 Activities – 1997/1998	1998-05-15
TC 192 N 135	Report of the Eleventh Meeting of ISO/TC 192, Gas Turbines, 4 June 1998, Stockholm, Sweden	1998-07-24
TC 192 N 136	Information from the ISO Central Secretariat	1998-07-24
TC 192 N 137	Summary of Voting on TC 192 N 133, ISO/CD 3977-4.2, Gas Turbines – Procurement – Part 4: Fuels and Environment	1998-09-23
TC 192 N 138	ISO TMB Communique – July 1998	1998-09-23
TC 192 N 139REV	Revised Summary of Voting on TC 192 N 126R, Determination of the heat input into the HRSG, New Amendment to ISO 2314	1998-07-23
TC 192 N 140	Summary of Voting on TC 192 N 127R, Optimisation/Balancing of simple/combined cycle operation, New Amendment to ISO 2314	1998-10-23

## ISO/TC 192 Document Register

Document Number	Title/Description	Distribution Date
TC 192 N 141	Summary of Voting on TC 192 N 128R, HRSG with Catalysts, New Amendment to 3977, Part 6	
TC 192 N 142	Chairman's Report on Low NOx Measurement	1999-01-08
TC 192 N 143	ISO Central Secretariat requirements for provision of text and graphics in electronic form	1999-01-08
TC 192 N 144	ISO's Long-range strategies, 1999-2001	1999-01-08
TC 192 N 145	Meeting Notice and Draft Agenda for the ISO/TC 192 Plenary Meeting, 9 June 1999, Indianapolis	1999-02-08
TC 192 N 146	ISO/TC 192 Annual Report for 1998	1999-02-08
TC 192 N 147	Inaccuracy of Single Digit NOx Measurement	1999-02-10
TC 192 N 148	Letter from ISO Central Secretariat Regarding ISO Business Plans	1999-03-23
TC 192 N 149	Revised Draft Agenda for the 9 June 1999 ISO/TC 192 Meeting, Indianapolis, IN	1999-03-23
TC 192 N 150	Report of the Secretariat – 1999	1999-03-18
TC 192 N 151	ISO/Technical Management Board Communique - April 1999	
TC 192 N 152	U.S. Proposal on Electric Power Applications - Report to ISO/TC 192 Plenary, 9 June 1999	1999-07-29
TC 192 N 153	Report of the Twelfth Meeting of ISO/TC 192, 9 June 1999, Indianapolis, IN	1999-07-23
TC 192 N 154	New Work Item Proposal on Electric Power Application Requirements for ISO 3977	1999-07-23
TC 192 N 155	Nomination of Mr. Roy Allen as ISO/TC 192 Chairman	1999-07-23
TC 192 N 156	Transfer of ISO/TC 192 Secretariat	1999-07-23
TC 192 N 157	New Work Item Proposal on Trend Monitoring Systems for Gas Turbine Installations	1999-07-29
TC 192 N 158	ISO/TC 192 Annual Report for 1999	2000-02-15
TC 192 N 159	Summary of Voting on TC 192 N 154, Electric Power Application Requirements for ISO 3977	2000-02-25
TC 192 N 160	Summary of Voting on TC 192 N 157, Trend Monitoring Systems for Gas Turbine Installations	2000-02-25
TC 192 N 161	Notice for the TC 192 Meeting, 9-10 May 2000 in Munich, Germany	2000-02-25
TC 192 N 162	Summary of voting for ISO/DIS 3977-4	2000-03-22
TC 192 N 163	Draft Agenda for the 10 May 2000 ISO/TC 192 Meeting, Munich, Germany	2000-03-27
TC 192 N 164	Report of the Secretariat – 2000	2000-05-02
TC 192 N 165	Report of the Thirteenth Meeting of ISO/TC 192, 10 May 2000, Munich, Germany	2000-08-28
TC 192 N 166	Notice for the TC 192 Meeting, 7 June 2001 in New Orleans, Louisiana	2001-03-19
TC 192 N 166 rev	Revised Notice for the TC 192 Meeting, 7 June 2001 in New Orleans, Louisiana	2001-05-10
TC 192 N 167	Summary of voting for ISO/DIS 3977-6	2001-03-22
TC 192 N 168	Summary of voting for ISO/DIS 3977-5.2	2001-03-22
TC 192 N 169	2001 Systematic Review of ISO 11042-1:1996	2001-03-22
TC 192 N 170	2001 Systematic Review of ISO 11042-2:1996	2001-03-22
TC 192 N 171	2001 Systematic Review of ISO 11086:1996	2001-03-22
TC 192 N 172	Database records concerning ISO technical committees (former annual reports)	2001-03-22
TC 192 N 173	Draft Agenda for the 07 June 2001 ISO/TC 192 Meeting, New Orleans, Louisiana	2001-05-14
TC 192 N 174	Gas Turbine Safety Presentation for 07 June 2001 ISO/TC 192 Meeting	2001-05-14
TC 192 N 175	Report of the Secretariat – 2001	2001-05-18
TC 192 N 175 rev	Revised Report of the Secretariat – 2001	2001-06-07
TC 192 N 176	Report to the Status of Work – TC 192/WG 8 – 2001	2001-05-25
TC 192 N 177	Report to the Status of Work – TC 192/JWG 4 – 2001	2001-05-25
TC 192 N 178	New Work Item Proposal on Gas Turbine Applications – Safety	2001-06-11
TC 192 N 179	Report of the Fourteenth Meeting of ISO/TC 192, 07 June 2001, New Orleans, LA	2001-06-18
TC 192 N 180	Results of 2001 Systematic Review of ISO 11042-1:1996	2001-07-10
TC 192 N 181	Results of 2001 Systematic Review of ISO 11042-2:1996	2001-07-10
TC 192 N 182	Results of 2001 Systematic Review of ISO 11086:1996	2001-07-10
TC 192 N 183	ISO/CD 19860, Gas Turbines – Trend monitoring systems for gas turbine installations	2001-08-15
TC 192 N 183 rev	ISO/CD 19860, Gas Turbines – Trend monitoring systems for gas turbine installations	2001-09-04
TC 192 N 184	Results of Voting on New Work Item Proposal, TC 192 N 178, Gas Turbine Applications – Safety	2001-09-20
TC 192 N 185	Notice for the TC 192 Meeting, 6 June 2002 in Amsterdam, The Netherlands	2001-10-18
TC 192 N 186	Re-constitution of ISO/TC28/SC 4/WG 5	2001-10-23
TC 192 N 187	Result of voting for ISO/FDIS 3977-5	2001-11-19
TC 192 N 188	2002 Systematic Review of ISO 3977-1:1997	2001-11-26
TC 192 N 189	2002 Systematic Review of ISO 3977-2:1997	2001-11-26
TC 192 N 190	Additional Information Regarding the TC 192 Meeting, 6 June 2002 – Amsterdam	2002-01-30
TC 192 N 191	ISO Livelink - Registration Form for Users to the ISO/TC Server	2002-02-01
TC 192 N 192	Results of Voting on TC 192 N 183 rev, ISO/CD 19860 - Gas turbines - Trend monitoring systems for gas turbine applications	2002-03-06
TC 192 N 193	Draft Agenda for the 06 June 2002 ISO/TC 192 Meeting, Amsterdam	2002-03-18
TC 192 N 194	Report of the Secretariat - 2002	2002-03-18
TC 192 N 195	Revised Meeting Location for the ISO/TC 192 Meetings in Amsterdam, The Netherlands	2002-04-02
TC 192 N 196	Revised Meeting Dates for the ISO/TC 192 Meetings in Amsterdam, The Netherlands	2002-04-15
TC 192 N 197	Result of voting for ISO/FDIS 3977-4	2002-04-19
TC 192 N 198	Revised Report of the Secretariat - 2002	2002-06-06

## ISO/TC 192 Document Register

Document Number	Title/Description	Distribution Date
TC 192 N 199	Report of the Fifteenth Meeting of ISO/TC 192, 06 June 2002, Amsterdam, The Netherlands	2002-06-19
TC 192 N 200	Result of Systematic Review of ISO 3977-1:1997	2002-07-22
TC 192 N 201	Result of Systematic Review of ISO 3977-2:1997	2002-07-22
TC 192 N 202	Result of Voting on New Work Item Proposal – Revision of ISO 2314	2002-10-15
TC 192 N 203	2003 Systematic Review of ISO 10494:1993	2002-12-23
TC 192 N 204	Notice for the TC 192 Meeting, 19 June 2003 in Atlanta, Georgia, USA	2003-03-07
TC 192 N 205	Draft Agenda for the 19 June 2003 ISO/TC 192 Meeting, Atlanta, Georgia, USA	2003-03-19
TC 192 N 206	Revised Report of the Secretariat - 2003	2003-06-19
TC 192 N 207	NWIP – Requirements for Microturbines Used in Combined Heat and Power Cycle Applications	2003-05-02
TC 192 N 208	Report of the Sixteenth Meeting of ISO/TC 192, 19 June 2003, Atlanta, USA	2003-06-26
TC 192 N 209	Result of 2003 Systematic Review of ISO 10494:1993	2003-08-04
TC 192 N 210	Result of Voting on New Work Item Proposal – Requirements for microturbines used in power generation or combined heat and power applications	2003-09-12
TC 192 N 211	Result of Voting on ISO/DIS 19860 - Gas turbines - Trend monitoring systems for gas turbine applications	2003-10-07
TC 192 N 212	2004 Systematic Review of ISO 3977-9:1999	2003-12-01
TC 192 N 213	Next Meeting Date – ISO/TC 192 Plenary - 2004	2003-12-08
TC 192 N 214	Notice for the TC 192 Meeting, 14 June 2004 in Vienna, Austria	2004-02-12
TC 192 N 215	Draft Agenda for the 14 June 2004 ISO/TC 192 Meeting, Vienna, Austria	2004-04-09
TC 192 N 216 rev	Revised Report of the Secretariat - 2004	2004-06-14
TC 192 N 217	ISO/CD 21789, Gas Turbines – Safety	2004-06-29
TC 192 N 218	Result of 2004 Systematic Review of ISO 3977-9:1999	2004-07-12
TC 192 N 219	Report of the Seventeenth Meeting of ISO/TC 192, 14 June 2004, Vienna, Austria	2004-07-20
TC 192 N 220	Result of Voting on ISO/CD 21789, Gas Turbines – Safety	2004-10-08
TC 192 N 221	Next Meeting Date – ISO/TC 192 Plenary – 06 June 2005	2005-01-06
TC 192 N 222	ISO/CD 21789.2, Gas turbine applications – Safety	2005-01-17
TC 192 N 223	Draft Agenda for the 06 June 2005 ISO/TC 192 Meeting - Reno, Nevada, USA	2005-04-06
TC 192 N 224	Report of the Secretariat - 2005	2005-04-06
TC 192 N 225	Result of Voting on ISO/CD 21789.2, Gas turbine applications – Safety	2005-04-29
TC 192 N 226	Report of the Eighteenth Meeting of ISO/TC 192, 06 June 2005, Reno, Nevada, USA	2005-06-27
TC 192 N 227	New Work Item Proposal – Cogeneration systems – Technical declaration for planning	2005-10-20
TC 192 N 228	2006 Systematic Review of ISO 3977-5:2001	2005-12-14
TC 192 N 229	2006 Systematic Review of ISO 11042-1:1996	2005-12-14
TC 192 N 230	2006 Systematic Review of ISO 11042-2:1996	2005-12-14
TC 192 N 231	2006 Systematic Review of ISO 11086:1996	2005-12-14
TC 192 N 232	Result of Voting on New Work Item Proposal – Cogeneration systems – Technical declaration for planning	2006-01-24
TC 192 N 233	ISO/CD 21789.3, Gas turbine applications - Safety	2006-01-31
TC 192 N 234	Next Meeting Date – ISO/TC 192 Plenary – 11 May 2006	2006-02-01
TC 192 N 235	Draft Agenda – ISO/TC 192 Plenary Meeting – 11 May 2006 – Barcelona, Spain	2006-03-02
TC 192 N 236	Report of the Secretariat - 2006	2006-03-06
TC 192 N 237	ISO/CD 2314, Gas turbines – Acceptance tests	2006-03-14
TC 192 N 238	Re-establish New Work Item Proposal ISO/NP 19859 – Gas turbines – Electric power generation – Requirements for power generation applications	2006-03-23
TC 192 N 239	Result of Voting on ISO/CD 21789.3 - Gas turbine applications - Safety	2006-05-01
TC 192 N 240	Result of Voting on Reestablishment of New Work Item Proposal - ISO/NP 19859 - Gas turbines - Electric power generation - Requirements for power generation applications	2006-05-03
TC 192 N 241	Result of Voting on ISO/CD 2314 - Gas turbines - Acceptance tests	2006-06-14
TC 192 N 242	Report of the Nineteenth Meeting of ISO/TC 192, 11 May 2006, Barcelona, Spain	2006-08-21
TC 192 N 243	Result of 2006 Systematic Review of ISO 3977-5:2001	2006-10-11
TC 192 N 244	Result of 2006 Systematic Review of ISO 11042-1:1996	2006-10-11
TC 192 N 245	Result of 2006 Systematic Review of ISO 11042-2:1996	2006-10-11
TC 192 N 246	Result of 2006 Systematic Review of ISO 11086:1996	2006-10-11
TC 192 N 247	Next Meeting Date – ISO/TC 192 Plenary – 18 May 2007	2007-01-18
TC 192 N 248	Correction to N 247 – Next Meeting Date – ISO/TC 192 Plenary – 17 May 2007	2007-01-22
TC 192 N 249	ISO/TC 192 N 249 - Draft Agenda - ISO/TC 192 Plenary Meeting - 17 May 2007 - Montreal, Canada	2007-04-06
TC 192 N 250	Report of the Secretariat - 2007	2007-04-06

ISO TC 192, WG 10, ISO 21789, Gas Turbine Applications Safety

Convenor's report 2006-2007

1. The review of comments on the 3<sup>rd</sup> CD was completed in Barcelona 9<sup>th</sup>-11<sup>th</sup> May 2006. The revised draft was sent to ISO on 30<sup>th</sup> June 2006 for translation and the English and French versions of ISO DIS 21789 were published on 8<sup>th</sup> October 2006.
2. The ballot closed on 12<sup>th</sup> March 2007 and was positive in favour. There was one vote against the draft; no reason has been forwarded.
3. A total of 480 comments were received by ISO and forwarded for WG10 to review. A gratifyingly small number of editorial comments were received from ISO. It was disappointing that the remaining comments were not collated for us. Approximately 270 comments were reviewed at a meeting in London 30<sup>th</sup> April – 2<sup>nd</sup> May 2007. At this stage, review is noticeably slower since the group recognise that this is the last opportunity to make technical amendments to the draft. The inclusion of criteria for acceptable levels of risk is seen as essential by the group, but agreement over them is proving particularly difficult to achieve. A 2 hour Webex meeting has been kindly arranged by GE for 10<sup>th</sup> May. If successful, this will be repeated if and as necessary. A further meeting in London has been arranged for 13<sup>th</sup> – 15<sup>th</sup> June 2007 when it is intended and expected to complete the process.
4. Following implementation of the decisions made by WG10 in respect of these comments, the FDIS will be sent to ISO for amendment of the French version and publication. The intention is to complete the implementation by mid-July.

R C Santon  
Convenor, TC192/WG 10  
08 May 2007

1. **Opening of the Meeting (0900) - R. Allen**
  
2. **Roll Call of Delegates**
  
3. **Introduction by the Chairman - R. Allen**
  
4. **Adoption of the Agenda - R. Crane**  
Document: TC 192 N 249
  
5. **Appointment of the Drafting Committee - R. Allen**
  
6. **Report of the Secretariat - R. Crane**  
Document: TC 192 N 250
  
7. **Reports of Working Groups**
  - 7.1 **WG 3 - Combined cycles (Secretariat: NEN) - R. van Heijl**
  
  - 7.2 **WG 4 - Joint TC 192-TC 62/SC 6 WG – Gas turbine use (Secretariat: DIN) - K. Parczyk**
    - 7.2.1 **3977-3 - Gas turbines - Procurement - Part 3: Design requirements**  
  
ISO 3977-3:2004 was published 2004-08-15.
    - 7.2.2 **3977-7 - Gas turbines - Procurement - Part 7: Technical information**  
  
ISO 3977-7:2002 was published on 2002-07-01.
    - 7.2.3 **3977-8 - Gas turbines - Procurement - Part 8: Inspection, testing, installation and commissioning**  
  
ISO 3977-8:2002 was published on 2002-07-01.

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- 7.3 WG 7 - Fuels, environment (Secretariat: ANSI) - B. Rising**
- 7.3.1 3977-4 - Gas turbines - Procurement - Part 4: Fuels and environment**
- ISO 3977-4:2002 was published on 2002-06-01.
- 7.3.1 3977-4 - Gas turbines - Procurement - Part 4: Fuels and environment**
- ISO 3977-4:2002 was published on 2002-06-01.
- 7.4 WG 8 – Trend monitoring systems for gas turbine installations (Secretariat: DIN) - K. Parczyk**
- 7.4.1 19860 - Gas turbines - Trend monitoring systems for gas turbine installations**
- ISO 19860:2005 was published on 2005-03-15.
- 7.5 WG 9 – Electric power applications (Secretariat: BSI) – R. Wheadon**
- 7.5.1 19859 - Requirements for the procurement of gas turbines for electric power**
- Target Dates  
CD: 2007-05-03  
DIS: 2007-11-03  
FDIS: 2008-11-03  
IS: 2009-05-03
- 7.6 WG 10 – Gas turbine safety (Secretariat: BSI) - R. Santon**
- 7.6.1 21789 - Gas turbine applications - Safety**
- The ballot for ISO/DIS 21789 was approved on 2007-03-14.
- 7.7 WG 11 – Acceptance tests (Secretariat: DIN) - J. Zachary (ANSI)**
- 7.7.1 Revision of ISO 2314 - Gas turbines - Acceptance tests**
- The ballot for the committee draft (N 237), ISO/CD 2314, was approved as N 241.
- Target Dates  
DIS: 2007-01-25  
FDIS: 2008-01-25  
IS: 2008-07-25

**7.8 WG 12 – Microturbines (Secretariat: BSI) - A. Eynstone**

**7.8.1 19372 – Requirements for microturbines used in power generation or combined heat and power applications**

Target Dates

CD: 2005-09-12

DIS: 2007-03-10

FDIS: 2008-09-10

IS: 2009-03-10

**7.9 WG 13 – Cogeneration Systems (Secretariat: JISC) - A. Suzuki**

**7.9.1 26382 – Cogeneration systems – Technical declarations for planning**

Target Dates

CD: 2007-01-24

DIS: 2007-07-24

FDIS: 2008-07-24

IS: 2009-01-24

**8. New Work Item Proposals**

**9. ISO/TC 192 Policy Matters**

**10. Other Business**

**11. Future Meetings**

2008 June Berlin, Germany (ASME Turbo Expo 2008, 09-13 June 2008)

**12. Approval of Resolutions**

**13. Adjournment**