**Events classified as Significant this month:**

|  |  |
| --- | --- |
| **/** |  |

**Events classified as Noteworthy this month:**

|  |  |
| --- | --- |
| [**WER TYO 17-0329**](http://www.wano.org/OperatingExperience/OE_Database_2012/Pages/EventReportDetail.aspx?ids=29313) | Main control room operator station unavailable |
| [**WER TYO 17-0324**](http://www.wano.org/OperatingExperience/OE_Database_2012/Pages/EventReportDetail.aspx?ids=29308) | Unexpected Loss of Reactor Coolant Water Level during Reactor Head Removal |
| [**WER TYO 17-0300**](http://www.wano.org/OperatingExperience/OE_Database_2012/Pages/EventReportDetail.aspx?ids=29208) | Excessive defects were found in RT inspection of BOSS weld joints of Unit 1 |
| [**WER PAR 17-0443**](http://www.wano.org/OperatingExperience/OE_Database_2012/Pages/EventReportDetail.aspx?ids=29362) | Startup Failures during low power test on emergency diesel generator train A |
| [**WER PAR 17-0437**](http://www.wano.org/OperatingExperience/OE_Database_2012/Pages/EventReportDetail.aspx?ids=29272) | Automatic reactor scram due to a fault on the main transformer |
| [**WER PAR 17-0424**](http://www.wano.org/OperatingExperience/OE_Database_2012/Pages/EventReportDetail.aspx?ids=29250) | Reactor Manually Shutdown Due To Failure Of Main Boiler Feed Pump Impeller |
| [**WER PAR 17-0414**](http://www.wano.org/OperatingExperience/OE_Database_2012/Pages/EventReportDetail.aspx?ids=29240) | Improper Welded Connection of Reactor Coolant Curcuit Auxiliary Pipeline |
| [**WER ATL 17-1042**](http://www.wano.org/OperatingExperience/OE_Database_2012/Pages/EventReportDetail.aspx?ids=29446) | Instrument Line Nozzle Leak Identified During Reactor Pressure Vessel Leakage Test |
| [**WER ATL 17-0991**](http://www.wano.org/OperatingExperience/OE_Database_2012/Pages/EventReportDetail.aspx?ids=29302) | #PRELIMINARY# Unplanned Reactor Trip from 100% as a Result of the Loss of a 4kv Bus |
| [**WER ATL 17-0950**](http://www.wano.org/OperatingExperience/OE_Database_2012/Pages/EventReportDetail.aspx?ids=29187) | Unusual Event Declaration Results From Work Performed Outside of a Troubleshooting Plan |

**New documents issued this month:**

None

**Performance Analysis (PA) comments**

At the end of August, WANO held a performance analysis meeting to identify the main negative trends in the industry. All regional centres and London Office agreed that WANO should investigate the following six areas in a greater detail:

* *Operator fundamentals* – many OE events and AFIs show deficiencies in this area which resulted in inadequate response to events
* *Fire Protection* – many AFIs show deficiencies in fire protection. Few OE reports are related to fire but the ones reported had major consequences
* *New units* – new plants present a number of challenges, from operator preparedness to design deficiencies
* *Maintenance fundamentals* – many OE events and AFIs show deficiencies in this area resulting in major events
* *Preventive maintenance* – this was already highlighted in previous monthly reports
* *Leadership issues* – many events are caused by underlying leadership issues.

WANO will take a closer look at these six areas in the next months to identify specific issues and suggest effective recommendations.

Regarding reporting events, PC keeps reporting fewer events compared to previous year. This issue was discussed with PC and it was suggested to raise it at the next WIO meeting in September – see also graphs below. Moreover, these events were not reported in a timely manner (median for PC was 173 days).

**Statistics**

**Event Reporting Level and Timeliness**

**WANO Event Reports (WERs) & Preliminary WERs published by PACT**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Year** | **Atlanta** | **Moscow** | **Paris** | **Tokyo** | **Total** |
| **2017** | **1048** | **177** | **462** | **361** | **2048** |
| 2016 | 1533 | 274 | 1134 | 478 | 3419 |
| 2015 | 1443 | 273 | 1038 | 329 | 3,083 |

**Units in operations (after first criticality)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Atlanta** | **Moscow** | **Paris** | **Tokyo** | **Total** |
| *No. of operational units* | *125* | *75* | *146* | *110* | *456* |
| *No. of units with no WER in the past 12 months* | *-* | *1 (KUDANKULAM 2)* | *1(RINGHALS 2)* |  | *2* |

**WER Reporting Median (Days) – Goal of 140 days**

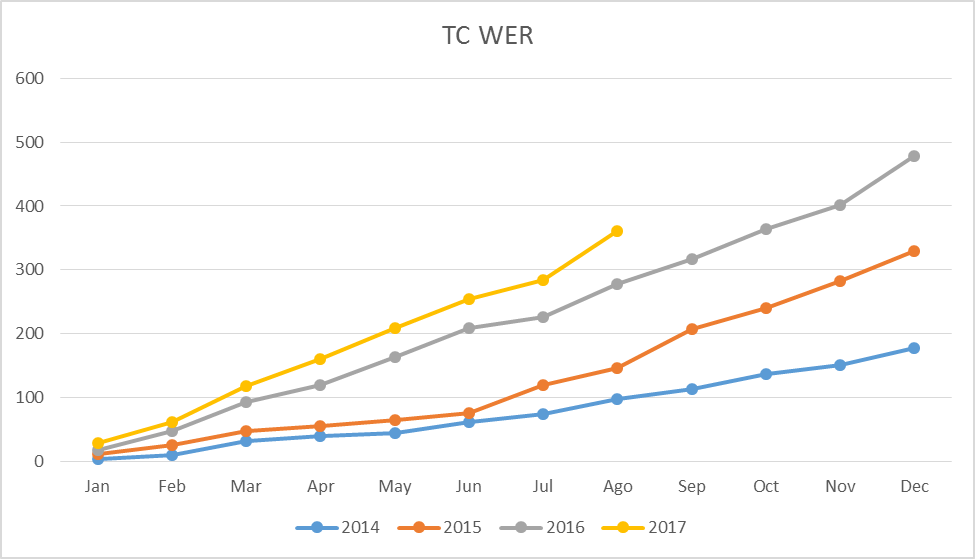
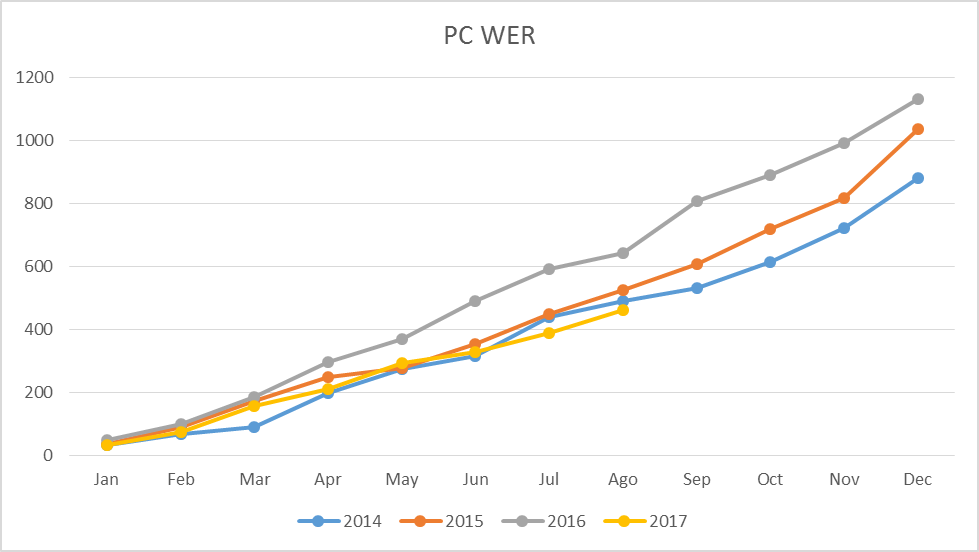
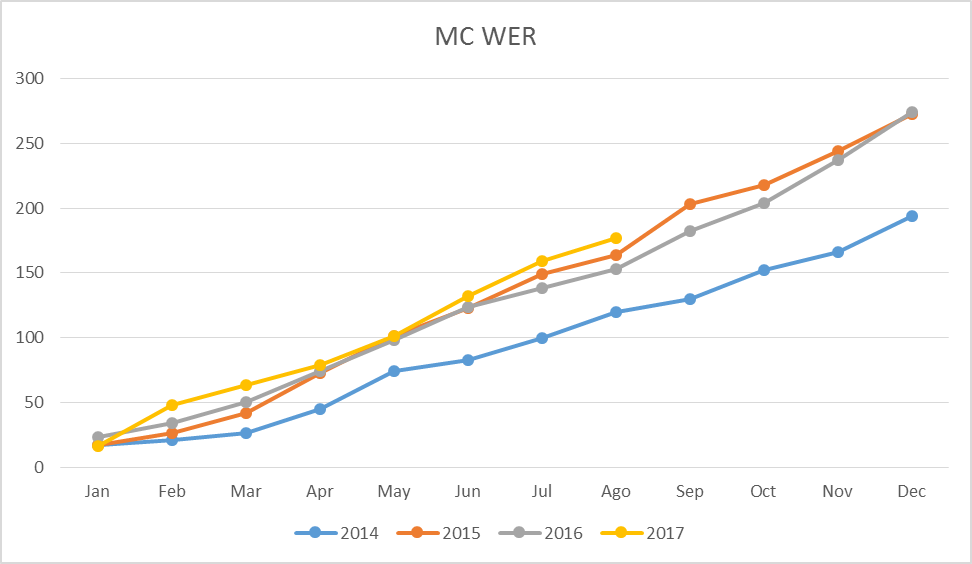
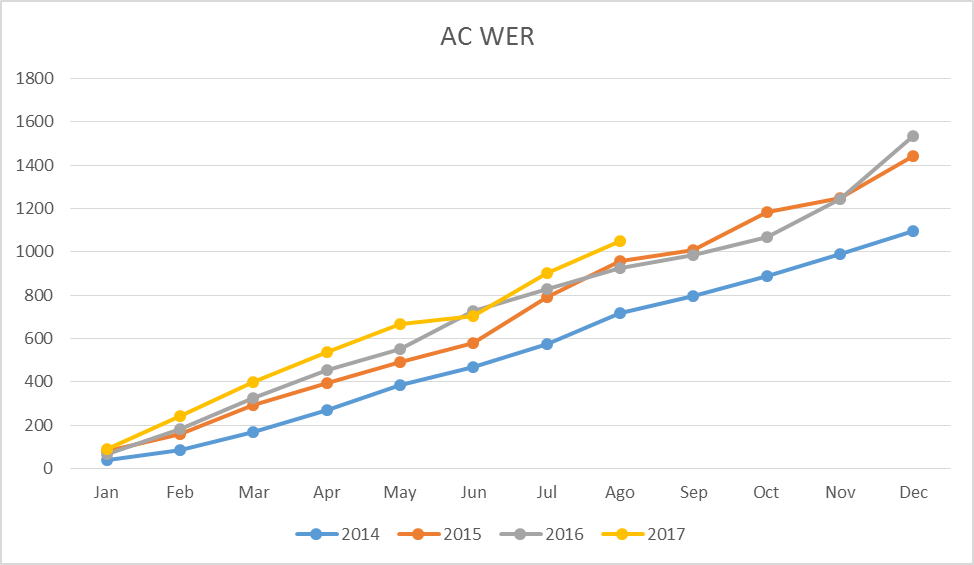
|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Atlanta** | **Moscow** | **Paris** | **Tokyo** |
| **2017** | **114** | **110** | **173** | **128** |
| 2016 | 118 | 102 | 133 | 126 |
| 2015 | 99 | 108 | 127 | 118 |

**Preliminary WER Reporting Median (Days) – Goal of 30 days**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Atlanta** | **Moscow** | **Paris** | **Tokyo** |
| **2017** | **54** | **2** | **27** | **32** |
| 2016 | 14 | 2 | 61 | 123 |
| 2015 | 23 | 2 | 58 | 54 |

**Notes:**

1. Event reporting numbers are based on the following rules: If a WER or Preliminary WER was updated, the updated version is not counted as a newly reported event. If a single event affects more than one unit at a station, this is counted as one report. A generic WER affecting a fleet of plants or more than one plant is also counted as one report.

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