

ภาคผนวก ข

สถิติการเกิดอุบัติเหตุในโรงไฟฟ้า
บริษัท ราชบุรีเพาเวอร์ จำกัด

สถิติอุบัติเหตุ

| 2022 | Class | January | February | March | April | May | June | July | August | September | October | November | December | เสียกำลังผลิต |
|----------|-------|---------|----------|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|---------------|
| | A | | 1 | | 2 | | | | | | | | | 100% |
| | B | | | | 2 | | | | | | | | | 50% |
| | C | | | | | | | | | | | | | < 50% |
| | D | | | | | | | | | | | | | เล็กน้อย |
| Incident | | | | | | | | | | | | | | |



Class A 6-Feb.-22 Block-2 trip (ST20 HP Turbine load high)


Class A 18-Apr.-22 Block-1 trip all BFP stop

Class B 28-Apr.-22 GT11 WI pilot flow dev. Hi-Hi auto stop (350 MW)

Class B 28-Apr.-22 Load cannot reach AGC set point 276 MW (GT11 auto stop, GT12 FO. firing)

Class A 28-Apr.-22 GT12 Load run back ต่ำกว่า Min Gen. 0 MW

|  โรงไฟฟ้าบริษัท ราชบุรีเพาเวอร์ จำกัด | | RPCL Incident Inform | |
|---|--|---|------------------|
| | | รหัสเอกสาร : F-P-RPC-010-001 | แก้ไขครั้งที่ 08 |
| <input type="checkbox"/> Immediate <input checked="" type="checkbox"/> Final Report | | Report No. RPC IR- 378..... | |
| Title: Concrete curb was damaged by oil tanker at fuel oil unloading. | | | |
| 1. Type of Incident (ประเภทเหตุการณ์) | | <input type="radio"/> Class A <input type="radio"/> Class B <input checked="" type="radio"/> Class C (See Part 8) | |
| <div> <input type="checkbox"/> Plant Incident (Fill Part 1) (เหตุการณ์ที่เกิดขึ้นในโรงไฟฟ้า) </div> <div> <input checked="" type="checkbox"/> Accident (อุบัติเหตุ) <div> <input type="radio"/> Fire (Fill Part 4) (เพลิงไหม้) <input type="radio"/> Property damage (Fill Part 2) (ทรัพย์สินเสียหาย) <input type="radio"/> Body Injury (Fill Part 2) Party..... (การบาดเจ็บ) </div> </div> <div> <input type="checkbox"/> Environment (สิ่งแวดล้อม) <div> <input type="radio"/> Chemical Oil Spillage (Fill Part 5) (สารเคมี/ น้ำมัน ทรั่วไหล) <input type="radio"/> Emission / Waste Water (Fill Part 3) (การปล่อยของเสีย / น้ำเสีย) </div> </div> <div> <input type="checkbox"/> Others (Fill Part 6) (อื่นๆ) </div> | | | |
| 2. Date/ Time Incident happened (วันที่/ เวลา ที่เกิดเหตุการณ์) | | Date/ Time Incident Informed (วันที่/ เวลา ที่แจ้งเหตุการณ์) | |
| Date 19/5/2022 Time 08:45 | | Date 19/5/2022 Time 09:00 | |
| 3. Place: Block-Unit No. or Name of Place. (สถานที่เกิดเหตุการณ์) | | | |
| <div> <input type="checkbox"/> Block No.1 <input type="checkbox"/> Block No.2 <input checked="" type="checkbox"/> Common <input type="checkbox"/> Not Power Plant Facility </div> <div> <div> <input type="checkbox"/> Gas Turbine No.11 <input type="checkbox"/> Gas Turbine No.21 <input type="checkbox"/> Gas Turbine No.12 <input type="checkbox"/> Gas Turbine No.22 <input type="checkbox"/> Steam Turbine No.10 <input type="checkbox"/> Steam Turbine No.20 </div> <div> <input type="checkbox"/> Restrict Area <input type="checkbox"/> Non-Restricted Area <input type="checkbox"/> Outside of Power Plant </div> </div> <div> Detail explanation: Concrete curb was damaged by a squeezing oil tanker at fuel oil unloading. </div> | | | |
| 4. Plant Status before Incident (สถานะของโรงไฟฟ้าก่อนเกิดเหตุการณ์) | | | |
| <div> Date & Time Fuel <input type="checkbox"/> Gas <input type="checkbox"/> Oil AGC <input type="checkbox"/> On <input type="checkbox"/> Off </div> <div> Block 1 load net = MW GT 11 = MW GT 12 = MW ST 10 = MW </div> <div> Block 2 load net = MW GT 21 = MW GT 22 = MW ST 20 = MW </div> | | | |
| 5. Event happened (ลักษณะของการเกิดเหตุการณ์) | | | |
| <p>On 19 May 2022, at 08.45 hrs. During the parking management to prepare the fuel Truck license plate no. 75-4580 Chon Buri (72-4589 Chon Buri, trailer's license plate) turned to right side to prepare to reverse into fuel oil unloading. At that time, the rear wheel of the trailer on the left side got stuck with concrete curb caused the concrete curb and Tires of trailer damaged. After the incident, the driver confessed he did not see a concrete curb due to vision obstruction, Overgrown grass.</p>  | | | |
| Event found by (ผู้พบเหตุการณ์).....Paveen..... Party (หน่วยงาน)RPCL..... Tel.1043..... | | | |
| 6. Immediate Action Plan/Taken (ดำเนินการแก้ไขทันที) | | | |
| 1) Inform related persons about the incident. 2) Inform truck driver to be careful for concrete curb. | | | |
| 7. Recommended Actions for long term (ขอเสนอ (ถ้า required ใน Final report) (ดำเนินการแก้ไขระยะยาว) | | | |
| 1) Concrete curb repair and painting with Black and white. (Plan to finish end of June 2022) 2) Install poles to show the curb line complying with arrangements for safe parking of oil tankers.(Plan to finish end of June 2022) | | | |
| 8. Notice/Claim to/from outside (ข้อร้องเรียนจากภายนอก) | | 9. Human Performance Related (บุคคลที่เกี่ยวข้อง) | |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No from/to: _____ | | <input type="checkbox"/> Human behavior worksheet (Fill Part 7) (DO NOT SPECIFY INDIVIDUAL NAME) | |
| | | 10. Follow-up Report Required (ติดตามรายงาน) | |
| | | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Due date: _____ | |
| 11. Signatures | | | |
| Report Verified by : _____ Date: _____ | | Report Approved by : _____ Date: _____ | |

| | | |
|--|--|--|
|  โรงไฟฟ้าบริษัท ราชบุรีเพาเวอร์ จำกัด | RPCL Incident Report (Accident) | |
| | รหัสเอกสาร : F-P-RPC-010-002-2 | แก้ไขครั้งที่ 08 |
| <input type="checkbox"/> Immediate <input checked="" type="checkbox"/> Final | | Report No. RPC IR- 378 |
| Title: Concrete curb was damaged by oil tanker at fuel oil unloading. | | |
| PART 2 ACCIDENT (อุบัติเหตุ) | | <input checked="" type="radio"/> Accident (อุบัติเหตุ) <input type="radio"/> Near Miss (เหตุการณ์เกือบเกิด) |
| Accident Date (วันที่เกิดอุบัติเหตุ) : 19/5/2022 Time (เวลา) : 08:45 Place of Accident (สถานที่เกิดเหตุ) : Fuel oil Unloading Area Activity Before Accident (ก่อนเกิดอุบัติเหตุ) : Unloading diesel to tank1D | | |
| 2.1 CASE OF ACCIDENT (กรณีการเกิดอุบัติเหตุ) | | <input type="radio"/> Class A <input type="radio"/> Class B <input checked="" type="radio"/> Class C (See Part 8) |
| <input type="checkbox"/> Body Injury (การบาดเจ็บ) Type of injury: <input type="checkbox"/> Loss Time <input type="checkbox"/> No LossTime (ประเภทการบาดเจ็บ) <input type="checkbox"/> Disability <input type="checkbox"/> Dead Patient Name : _____ (ชื่อผู้บาดเจ็บ) Party (หน่วยงาน): _____ Treatment: <input type="checkbox"/> Site Clinic <input type="checkbox"/> Hospitalized (การรักษา) Place (สถานที่) : _____ Estimated time to recover : _____ Days (ระยะเวลาการรักษา) | | <input checked="" type="checkbox"/> Property damage (มูลค่าความเสียหาย) Damaged Property : _____ (ความเสียหายด้านทรัพย์สิน) Estimated Loss: 1,000 Baht (ความเสียหายโดยประมาณ) <input type="checkbox"/> Traffic accident (อุบัติเหตุทางคมนาคม) Damaged Property: _____ (ความเสียหายด้านทรัพย์สิน) Estimated Loss: _____ Baht (ความเสียหายโดยประมาณ) <input type="checkbox"/> Others (Specify): _____ (อื่นๆ) |
| 2.2 DETAILS OF ACCIDENT (รายละเอียดอุบัติเหตุ) | | |
| On 19 May 2022, at 08.45 hrs. During the parking management to prepare the fuel Truck license plate no. 75-4580 Chon Buri (72-4589 Chon Buri, trailer's license plate) turned to right side to prepare to reverse into fuel oil unloading. At that time, the rear wheel of the trailer on the left side got stuck with concrete curb. Make the concrete curb and Tires of trailer damaged. After the incident asked the driver he inform vehicle that during the right turn. He did not see a concrete curb because Overgrown grass obscured the concrete curb. Makes he thinks that the rear of the truck can pass. | | |
| Event found by (ผู้พบเหตุการณ์).....Paveen..... Party (หน่วยงาน)RPCL..... Tel.1043..... | | |
| Investigation Plan and Result (ผลการสอบสวนอุบัติเหตุ) | | |
| Investigation by Professional Safety Officer : Ms. Siriwan Thirawan Date: 20/05/2022 (การสอบสวนอุบัติเหตุโดย จป.วิชาชีพ) (วันที่) Describe the details of investigation including when, what, how, where etc. (อธิบายรายละเอียดการสอบสวนฯ) Truck driver did not see a concrete curb. Makes he thinks that the rear of the truck can pass. | | |
| Investigation Report shall be attached. (แนบรายงานการสอบสวนฯ) | | |
| 2.3 Root cause or Possible cause of incident and Countermeasures (สาเหตุที่เป็นไปได้ของเหตุการณ์ที่เกิดขึ้นและมาตรการป้องกัน) | | |
| Root Cause (สาเหตุ) (Describe the cause and the counter measures proposed in/after the investigation) Truck driver can't see concrete curb clearly. | | |
| For Prevention what should be done (แนวทางการป้องกันการเกิดซ้ำ) | | |
| Painting the concrete curb with Black and white | Responsible by Paveen | Date 24/06/22 |
| Install poles to show the curb line complying with arrangements for safe parking of oil tankers. | Responsible by Paveen | Date 24/06/22 |
| | Responsible by | Date |
| Other recommendations (ข้อเสนอแนะอื่นๆ) | | |
| Road Marking Paint for truck parking during diesel unloading | Responsible by Paveen | Date 24/06/22 |
| | Responsible by | Date |
| | Responsible by | Date |
| 2.4 Attachment (เอกสารแนบ) | | |
| Following data shall be attached. (1) Pictures | | |





บริษัท ชุมราษฎร์ อิเลคทริคเซอร์วิส จำกัด

Chubu Ratchaburi Electric Services Co., Ltd.

128 หมู่ 6 ต.พิบูลทอง อ.เมือง จ.ราชบุรี 70000 โทรศัพท์ 032-719-300 โทรสาร 032-719-309

128 Moo 6, Tambol Pikhun-Thong, Amphur Muang, Ratchaburi 70000

Tel. 032-719-300 Fax. 032-719-309

นวบ - บพ.

IR-373 วันที่ 23 พ.ค. 2565

ส่งที่ 23/5/65

25291/65 - บพ.

รับที่ C80/65 วันที่ 23/5/65

ส่งที่ C80/65 วันที่ 23 พ.ค. 2565

May 20, 2022

Our ref. CRESCO-RPCL-2022-05-009

Attention: Managing Director

Ratchaburi Power Co., Ltd.

1828 Sukhumvit Road

Phrakanong Tai Sub-district,

Phrakanong District Bangkok 10260

1.3 น. นวบ - บพ.
1828 ถนนสุขุมวิท/กทม

รับ: 23/5/65
นายชนะ อิตตศักดิ์
อ. บพ.
23/พ.ค./65

CC : EGAT Director, RPCL Power Plant
Operation and Maintenance Project

Subject : Submission of Incident report RPC IR- 373 : Water flew out from HP/IP FWP 20A barrel during pump overhaul work.

Dear Mr. Boonchai Lersthavorntham,

CRESCO would like to submit the incident report (final) as follows.

- RPC IR-373 : Water flew out from HP/IP FWP 20A barrel during pump overhaul work.

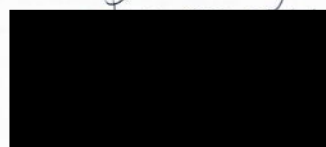
Please see attachment for more details and if you need more information, please feel free to contact us.

Yours sincerely,




Managing Director


Attachment : - RPC IR-373 : Water flew out from HP/IP FWP 20A barrel during pump overhaul work.



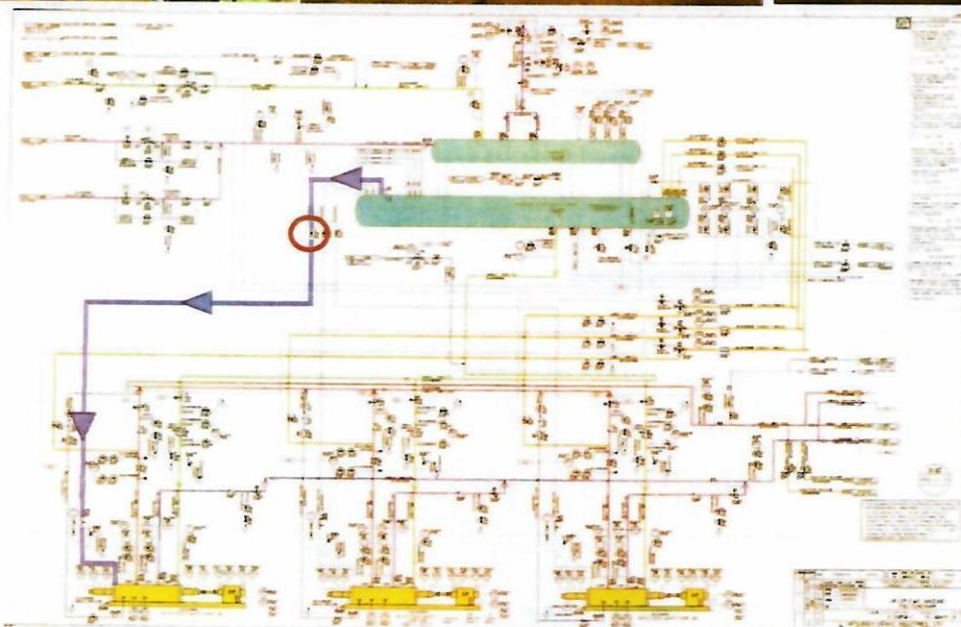
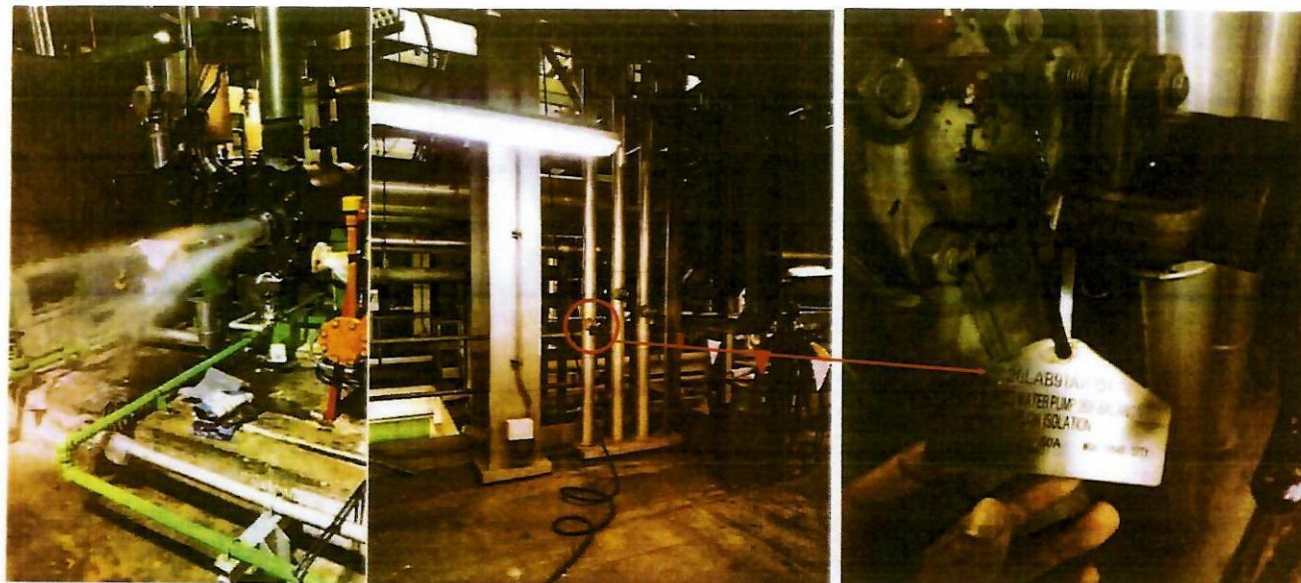
Asst. Technical Coordinator
Tel: 032-719-300 Ext. 3007
Fax: 032-719-309

รับ: 23/5/65
รท. นวบ/บพ.
23/5/65

|  บริษัท ผลิตไฟฟ้าราชบุรีโฮลดิ้ง จำกัด | | RPCL Incident Inform | |
|---|--|---|--|
| รหัสเอกสาร : F-P-RPC-010-001 | | แก้ไขครั้งที่ 08 | |
| <input type="checkbox"/> Immediate | | <input checked="" type="checkbox"/> Final Report | |
| Report No. RPC IR-373 | | | |
| Title: Water flow out from HP/IP FWP 20A barrel during pump overhaul work. | | | |
| 1. Type of Incident (ประเภทเหตุการณ์) | | <input type="radio"/> Class A <input type="radio"/> Class B <input checked="" type="radio"/> Class C (See Part 8) | |
| <div> <input type="checkbox"/> Plant Incident (Fill Part 1) (เหตุการณ์ที่เกิดขึ้นในโรงไฟฟ้า) </div> <div> <input checked="" type="checkbox"/> Accident (อุบัติเหตุ) </div> <div> <input type="checkbox"/> Near Miss (เหตุการณ์หวุดหวิด) </div> <div> <input type="radio"/> Fire (Fill Part 4) (เพลิงไหม้) </div> <div> <input checked="" type="radio"/> Property damage (Fill Part 2) (ทรัพย์สินเสียหาย) </div> <div> <input type="radio"/> Body Injury (Fill Part 2) Party..... (การบาดเจ็บ) </div> <div> <input type="checkbox"/> Environment (สิ่งแวดล้อม) </div> <div> <input type="radio"/> Chemical/ Oil Spillage (Fill Part 5) (สารเคมี/ น้ำมัน หกรั่วไหล) </div> <div> <input type="radio"/> Emission / Waste Water (Fill Part 3) (การปล่อยของเสีย / น้ำเสีย) </div> <div> <input type="checkbox"/> Others (Fill Part 6) (อื่นๆ) </div> | | | |
| 2. Date/ Time Incident happened (วันที่/ เวลา ที่เกิดเหตุการณ์) | | Date/ Time Incident Informed (วันที่/ เวลา ที่แจ้งเหตุการณ์) | |
| Date <u>18/1/2022</u> Time <u>17.46</u> | | Date <u>18/1/2022</u> Time <u>18.10</u> | |
| 3. Place: Block-Unit No. or Name of Place. (สถานที่เกิดเหตุการณ์) | | | |
| <div> <input type="checkbox"/> Block No.1 <input checked="" type="checkbox"/> Block No.2 <input type="checkbox"/> Common <input type="checkbox"/> Not Power Plant Facility </div> <div> <input type="checkbox"/> Gas Turbine No.11 <input type="checkbox"/> Gas Turbine No.21 <input type="checkbox"/> Restrict Area </div> <div> <input type="checkbox"/> Gas Turbine No.12 <input type="checkbox"/> Gas Turbine No.22 <input type="checkbox"/> Non-Restricted Area </div> <div> <input type="checkbox"/> Steam Turbine No.10 <input checked="" type="checkbox"/> Steam Turbine No.20 <input type="checkbox"/> Outside of Power Plant </div> <div> Detail explanation: FWP Building Block 2 </div> | | | |
| 4. Plant Status before Incident (สถานะของโรงไฟฟ้าก่อนเกิดเหตุการณ์) | | | |
| Date & Time <u>18/1/2022 17:46</u> Fuel <input type="checkbox"/> Gas <input type="checkbox"/> Oil AGC <input type="checkbox"/> On <input type="checkbox"/> Off | | | |
| Block 1 load net = <u>0</u> MW GT 11 = <u>0</u> MW GT 12 = <u>0</u> MW ST 10 = <u>0</u> MW | | | |
| Block 2 load net = <u>0</u> MW GT 21 = <u>0</u> MW GT 22 = <u>0</u> MW ST 20 = <u>0</u> MW | | | |
| 5. Event happened (ลักษณะของการเกิดเหตุการณ์) | | | |
| After Operator filled the water in the Pre-heater coil HRSG21&22 completed. Operator has been checked that all LP&HP/IP-FWPs. Suction motor operate valve was closed with LOTO Tag already After that Operator start CEP to fill the water to the Deaerator Storage Tank for manhole leakage check. While deaerator storage tank level almost full, it was found that water came out from casing HP/IP-FWP 20A continuously. Therefore, the filling was stopped and the water drained from the Deaerator immediately. | | | |
| Event found by (ผู้พบเหตุการณ์)...Mr.Korawit... Party (หน่วยงาน) ...BMD... Tel. | | | |
| 6. Immediate Action Plan/Taken (ดำเนินการแก้ไขทันที) | | | |
| 1) Stop fill the water to Deaerator Storage Tank and finding source of water. | | | |
| 2) Drain water at HP/IP-FWP and Deaerator Storage Tank then Cleaned up wet floor in FWP Block 2 area | | | |
| 7. Recommended Actions for long term (ดำเนินการแก้ไขระยะยาว) | | | |
| In case of overhaul pump, additional 6 manual block valves (Balancing flow isolation valve and Warming flow isolation valve) of HP/IP Feed Water Pump should be isolated. (KKS code : XDLAB91AA101, AA102, AA103, AA021, AA022, AA023) (Done Balancing Flow Isolation valve was added to safety plan for HP/IP Feed water pump overhaul work) | | | |
| 1) Mark up Deaerator storage tank upper manhole position at Level indicator (Sight glass) and compare with Level transmitter at DCS | | | |
| 2) (Done) | | | |
| 3) Review LOTO (Done Attachment 3) | | | |
| 8. Notice/Claim to/from outside (ขอรับรองจากภายนอก) | | 9. Human Performance Related (บุคคลที่เกี่ยวข้อง) | |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | <input type="checkbox"/> Human behavior worksheet (Fill Part 7) (DO NOT SPECIFY INDIVIDUAL NAME) | |
| from/to: _____ | | Due date: _____ | |
| 10. Follow-up Report Required (ติดตามรายงาน) | | | |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | |
| 11. Signature (ลงนาม) | | | |
| Report Prepared by : Mr. Peerapon Suppananont | | Report Verified by : Mr. Kriengsak Wisarnjarom | |
| N. Kriengsakornpremit | | N. Kriengsakornpremit | |
| Date: <u>19 May '22</u> | | Date: <u>19 May '22</u> | |
| Report Approved by : Mr. Chalee Benaratnong | | Report Approved by : Mr. Chalee Benaratnong | |
| 19/5/22 | | 19/5/22 | |

| | | |
|--|--|---|
|  โรงไฟฟ้าบีแอล บางปะกง จำกัด | RPCL Incident Report (Accident) รหัสเอกสาร : F-P-RPC-010-002-2 แก้ไขครั้งที่ 08 | |
| <input checked="" type="checkbox"/> Immediate <input type="checkbox"/> Final | | Report No. RPC IR- 373 |
| Title: Water flow out from HP/IP FWP 20A barrel during pump overhaul work. | | |
| PART 2 ACCIDENT (อุบัติเหตุ) <input checked="" type="radio"/> Accident (อุบัติเหตุ) <input type="radio"/> Near Miss (เหตุการณ์หวุดหวิด) | | |
| Accident Date (วันที่เกิดอุบัติเหตุ) : 18/1/2022 Time (เวลา) : 17.46 | | |
| Place of Accident (สถานที่เกิดเหตุ) : Feed Water Pump 20A | | |
| Activity Before Accident (ก่อนเกิดอุบัติเหตุ) : Fill water to Deaerator Storage Tank | | |
| 2.1 CASE OF ACCIDENT (กรณีการเกิดอุบัติเหตุ) <input type="radio"/> Class A <input type="radio"/> Class B <input checked="" type="radio"/> Class C (See Part 8) | | |
| <input type="checkbox"/> Body Injury (การบาดเจ็บ) Type of injury: <input type="checkbox"/> Loss Time <input type="checkbox"/> No Loss Time (ประเภทการบาดเจ็บ) <input type="checkbox"/> Disability <input type="checkbox"/> Dead Patient Name : _____ (ชื่อผู้บาดเจ็บ) Party (หน่วยงาน): _____ Treatment: <input type="checkbox"/> Site Clinic <input type="checkbox"/> Hospitalized (การรักษา) Place (สถานที่) : _____ Estimated time to recover : _____ Days (ระยะเวลาการรักษา) | | <input checked="" type="checkbox"/> Property damage (มูลค่าความเสียหาย) Damaged Property : _____ (ความเสียหายด้านทรัพย์สิน) Estimated Loss: _____ Baht (ความเสียหายโดยประมาณ) <input type="checkbox"/> Traffic accident (อุบัติเหตุทางคมนาคม) Damaged Property: _____ (ความเสียหายด้านทรัพย์สิน) Estimated Loss: _____ Baht (ความเสียหายโดยประมาณ) <input type="checkbox"/> Others (Specify): _____ (อื่นๆ) |
| 2.2 DETAILS OF ACCIDENT (รายละเอียดอุบัติเหตุ) | | |
| After Operator filled the water in the Pre-heater coil HRSG21&22 completed. Operator has been checked that all LP&HP/IP-FWPs. Suction motor operate valve was closed with LOTO Tag already After that Operator start CEP to fill the water to the Deaerator Storage Tank for manhole leakage check. While deaerator storage tank level almost full, it was found that water came out from casing HP/IP-FWP 20A continuously. Therefore, the filling was stopped and the water drained from the Deaerator immediately. | | |
| Event found by (ผู้พบเหตุการณ์)...Operator... Party (หน่วยงาน) ...Operator Shift 2... Tel. | | |
| Investigation Plan and Result (ผลการสอบสวนอุบัติเหตุ) | | |
| Investigation by Professional Safety Officer : _____ Mr. Wichet Poyen Date: 19/01/2022 (การสอบสวนอุบัติเหตุโดย จป.วิชาชีพ) (วันที่) | | |
| Describe the details of investigation including when, what, how, where etc. (อธิบายรายละเอียดการสอบสวนฯ) | | |
| No Found 3 valves X0LAB91AA101, X0LAB91AA102, X0LAB91AA103 in LOTO. | | |
| Investigation Report shall be attached. (แนบรายงานการสอบสวนฯ) | | |
| 2.3 Root cause or Possible cause of incident and Countermeasures (สาเหตุที่เป็นไปได้ของเหตุการณ์ที่เกิดขึ้นและมาตรการป้องกัน) | | |
| Root Cause (สาเหตุ) (Describe the cause and the counter measures proposed in/after the investigation) When filled Deaerator complete. Water from Deaerator flow back to HP/IP FWP20A through HP/IP Feed Water Pump 20A Balancing flow isolation valve.(20LAB91AA101) | | |
| For Prevention what should be done (แนวทางการป้องกันการเกิดซ้ำ) | | |
| Mark up Deaerator storage tank upper manhole position at Level indicator (Sight glass) and compare with Level transmitter at DCS (55 mm) | Responsible by | Operator Date 18/1/2022 |
| Additional 6 block valves X0LAB91AA101, AA102, AA103, AA021, AA022, AA023 | Responsible by | Operator Date 18/1/2022 |
| Review LOTO | Responsible by | Planing Date |
| Other recommendations (ข้อเสนอแนะอื่นๆ) | | |
| | Responsible by | Date |
| | Responsible by | Date |
| | Responsible by | Date |
| 2.4 Attachment (เอกสารแนบ) | | |
| Following data shall be attached. (1) Pictures (2) Incident Presentation (3) Remedy for LOTO IR-373 | | |

Incident Image



EGAT for
ALL
พลังงานเพื่อความเสมอภาค



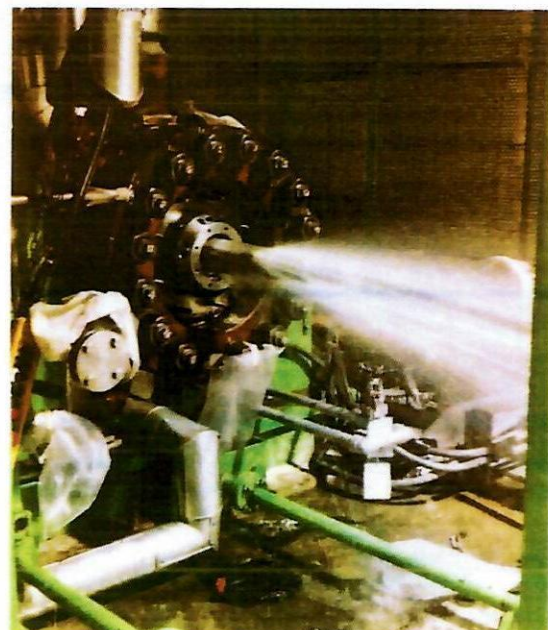
Water flew out from HPIP FWP 20A
barrel during pump overhaul

EGAT for **ALL**

Event

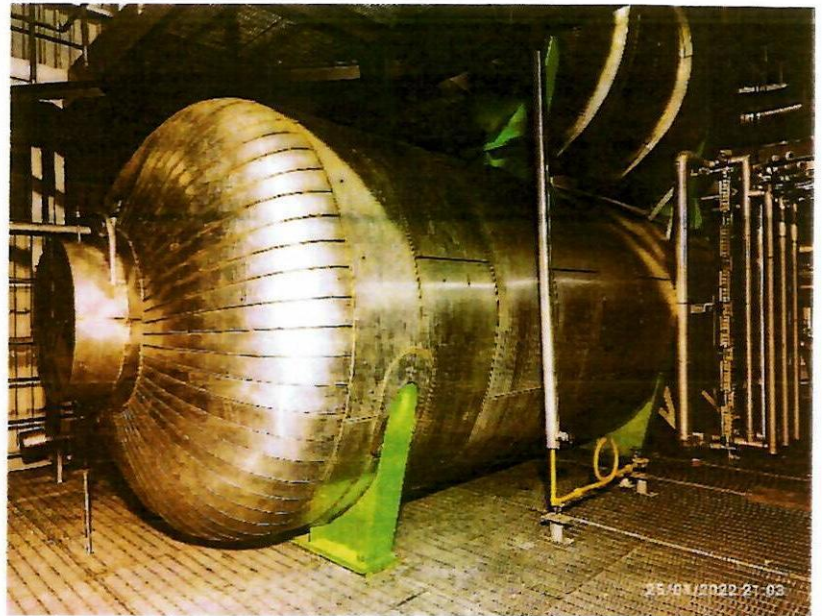
18 Jan 2022 17:46

While BMD assembly HP/IP Feed
water pump 20A found air and water
came out from gap between shaft
NDE side.



Immediate Action

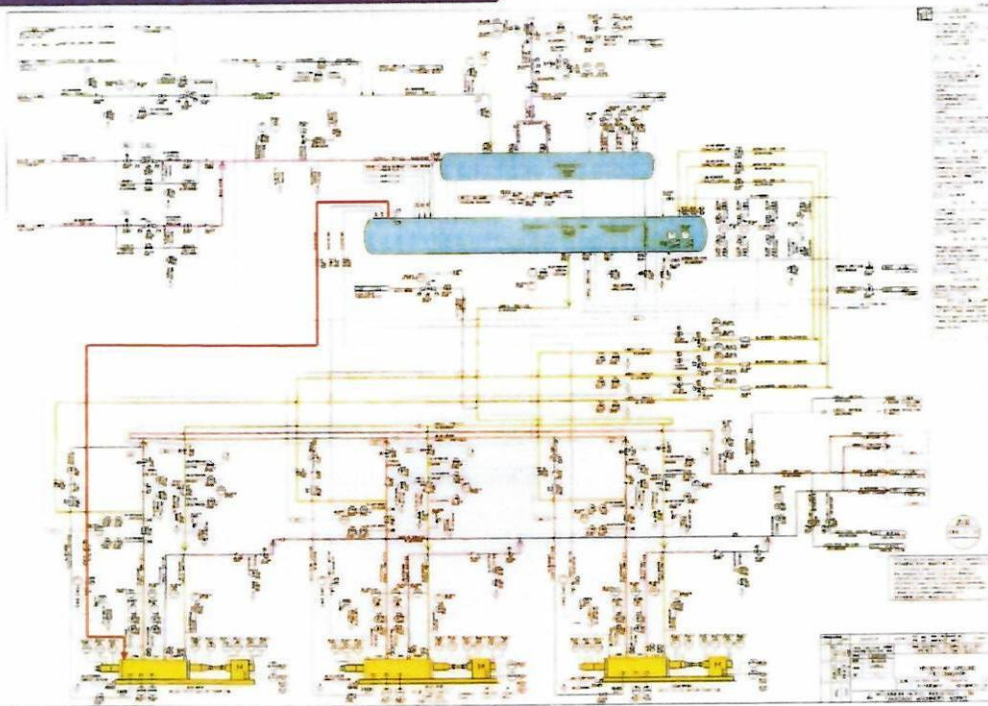
- Informed operator to stop filling water to Deaerator Storage Tank and drain water.
- Cleaned up floor at HP/IP FWP area.



Root cause

- Water level in Deaerator Storage Tank too high and overflow pass through Balancing Flow Isolation Valve.
- Balancing Flow Isolation Valve was open





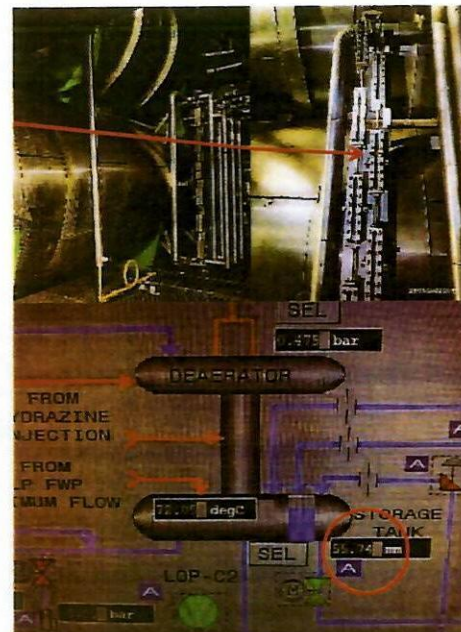
Improvement

- Add to close Balancing Flow Isolation Valve (KKS=x0LAB91AA101,102,103) to safety plan for overhaul HP/IP FWP

| | | | | | |
|----|------------------|---|--------|--------------------------|-----|
| 12 | 10LAB91AA015 | WARMING FLOW STRAINER INLET VALVE | CLOSE | <input type="checkbox"/> | |
| | | | | | NEW |
| 13 | 10LAB91AA021 | WATER WARMING FLOW ISOLATION VALVE | CLOSE | <input type="checkbox"/> | |
| | | | Remark | Key No. | |
| 14 | 10LAB91AA101 | HP/IP FEED WATER PUMP 10A BALANCING FLOW ISO VALVE DWS L4-75632 | CLOSE | <input type="checkbox"/> | |
| | | | Remark | Key No. | |
| 15 | 10LAB91AA001 | DISCHARGE VENT VALVE | OPEN | <input type="checkbox"/> | |
| | | | Remark | Key No. | |
| 16 | 10LAB91AA009 | DISCHARGE DRAIN VALVE | OPEN | <input type="checkbox"/> | |
| | | | Remark | Key No. | |
| 17 | 10LAC31AA011 | HP/IP FWP 10A Suction Casing Drain Valve | OPEN | <input type="checkbox"/> | |
| | | | Remark | Key No. | |
| 18 | 10LAC31AP101-10A | HP/IP FEED WATER PUMP A MOTOR 2360 kW TYPE HRN7 507-20E | OFF CB | <input type="checkbox"/> | |
| | | | Remark | Key No. | |

Improvement

- Mark up Deaerator storage tank upper manhole position at Level indicator (Sight glass) and compare with Level transmitter at DCS



Thank you

EGAT for
ALL
ณฟผ. เป็นของทุกคน เพื่อทุกคน

Attachment 3


Remedy for LOTO Incident HP/IP Feed Water Pump

Water flew out from HP/IP FWP 20A barrel during pump overhaul work.

ADD HP/IP FWP 10(A,B,C) and 20(A,B,C) Min Flow On-Off valve and HP/IP FWP 10(A,B,C)
(KKS=x0LAB91AA101,102,103) and 20(A,B,C) Balancing Flow Isolation Valve
(KKS=x0LAB91AA010,012,014)



in LOTO List increase From 17 to 19 isolation list

Add in Lockout Tag Out Plan



List View





Lock Out / Tag Out



| | | | | |
|-------------|----------------------------|---|----------------|--|
| Tag Out | | Site | Required State | Att |
| TO00328 | HP/IP FEED WATER PUMP A | RCBR | STOP |  |
| Location | | | | |
| 10LAC31AP1C | >> HP/IP FEED WATER PUMP A |  | | |

Lock Out Operations

Filter

19 - 19 of 19



| Location | Description | Locking Device Required State |
|---|--------------------------------------|---|
|  10LAB91AA0 >> | HP/IP FWP10A MIN FLOW ON-OFF VALVE (| CLOSE  |

Details


Location

10LAB91AA01 >>

Asset

>>

Description

HP/IP FWP10A MIN.FLOW ON-OFF VALVE OUTLET VALVE 

Locking Device Required State

CLOSE

Apply Sequence

Remove Sequence

New Row

Attachment 3

Lock Out / Tag Out

Applications

Queries

Actions

Out

anges

Report

ions

Library/Folders

Out

it

anks

Lock Out / Tag Out
19 - 19 of 19

| Tag Out | Description | Site | Required Sta |
|---------|-------------------------|------|--------------|
| T000329 | HP/IF FEED WATER PUMP B | RCBR | STOP |

Location: 10LAC31AP10 >> HP/IF FEED WATER PUMP B

Lock Out Operations Filter

| Location | Description | Locking Device Required State |
|------------|-------------------------------------|-------------------------------|
| 10LAB91AA0 | HP/IF FWP 10B MIN FLOW ON-OFF VALVE | CLOSE |






Details

| | |
|--|--|
| <p>Location: 10LAB91AA0 >></p> <p>Asset: >></p> <p>Description: HP/IF FWP 10B MIN FLOW ON-OFF VALVE OUTLET VALVE</p> | <p>Locking Device Required State: CLOSE</p> <p>Apply Sequence: <input type="text"/></p> <p>Remove Sequence: <input type="text"/></p> |
|--|--|

[New Row](#)

Attachment 3

Lock Out / Tag Out

List View Lock Out / Tag Out

ions
es





Tag Out
TO00330 HPI/P FEED WATER PUMP C

Site RCBR Required State STOP

Location
10LAC31AP1C >> HPI/P FEED WATER PUMP C

ns

Lock Out Operations  14 - 19 of 19






| Location | Description | Locking Device | Required State |
|---------------|-------------------------------------|--|----------------|
| 10LAB66AAC >> | DEAERATOR LEVEL CONTROL VALVE 10 (|  | CLOSE |
| 10LCA14AA1 >> | HP FEED WATER TEMPERATURE CONTR |  | CLOSE |
| 10GHC01AA >> | DEAERATOR FILLING WATER ISO VALVE |  | CLOSE |
| 10LAC31AP1 >> | HPI/P FEED WATER PUMP C MOTOR 235 |  | OFF CB |
| 10LAB91AA1 >> | HPI/P FEED WATER PUMP 10C BALANCIN |  | CLOSE |
| 10LAB91AA0 >> | HPI/P FWP 10C MIN FLOW ON-OFF VALVE |  | CLOSE |

Details

Location
10LAB91AA01 >>

Locking Device Required State
CLOSE

Lock Out / Tag Out

List View Lock Out / Tag Out


stions
ries







Tag Out
TO00331 HPI/P FEED WATER PUMP A

Site RCBR Required State STOP [Attachments](#)

Location
20LAC31AP1C >> HPI/P FEED WATER PUMP A

ons

Lock Out Operations  14 - 19 of 19

| Location | Description | Locking Device | Required State |
|---------------|-------------------------------------|---|----------------|
| 20LAB66AAC >> | DEAERATOR LEVEL CONTROL VALVE 20 (|  | CLOSE |
| 20LCA14AA1 >> | HPI FEED WATER TEMPERATURE CONTR |  | CLOSE |
| 20GHC01AA >> | DEAERATOR FILLING WATER ISO VALVE |  | CLOSE |
| 20LAC31AP1 >> | HPI/P FEED WATER PUMP MOTOR 2350 |  | OFF CB |
| 20LAB91AA1 >> | HPI/P FEED WATER PUMP 20A BALANCIN |  | CLOSE |
| 20LAB91AA0 >> | HPI/P FWP 20A MIN FLOW ON-OFF VALVE |  | CLOSE |

Details

Location
20LAB91AA01 >>

Locking Device Required State
CLOSE

Asset
>>

Apply Sequence

Attachment 3

Lock Out / Tag Out

List View Lock Out / Tag Out

| Tag Out | | Site | Required State | Attachments |
|---------|-------------------------|------|----------------|-------------|
| TC00332 | HPIIF FEED WATER PUMP B | RCCR | STOP | |

Location
20LAC31AP1C >> HPIIF FEED WATER PUMP B

Lock Out Operations Filter > 14 - 19 of 19

| Location | Description | Locking Device | Required State |
|---------------|-------------------------------------|----------------|----------------|
| 20LAB66AA0 >> | DEAERATOR LEVEL CONTROL VALVE 20 | CLOSE | |
| 20LCA14AA1 >> | HPI FEED WATER TEMPERATURE CONTR | CLOSE | |
| 20GHC01AA >> | DEAERATOR FILLING WATER ISO. VALVE | CLOSE | |
| 20LAC31AP1 >> | HPIIF FEED WATER PUMP MOTOR 2350 | OFF CB | |
| 20LAB91AA1 >> | HPIIF FEED WATER PUMP 20B BALANCIN | CLOSE | |
| 20LAB91AA0 >> | HPIIF PWP 20B MIN FLOW ON-OFF VALVE | CLOSE | |

Details

| | |
|----------------------------|--|
| Location 20LAB91AA01 >> | Locking Device Required State CLOSE |
|----------------------------|--|

Lock Out / Tag Out

List View Lock Out / Tag Out

| Tag Out | Site | Required State | Attachments |
|---------------------------------|------|----------------|-------------|
| T000333 HPI/P FEED WATER PUMP C | RCCR | STOP | |

Location: 20LAC31AP1C » HPI/P FEED WATER PUMP C

Lock Out Operations Filter 14 - 19 of 19

| Location | Description | Locking Device | Required State |
|---------------------|---|----------------|----------------|
| 20LAB66AAC » | DEAERATOR LEVEL CONTROL VALVE 201 | CLOSE | |
| 20LCA14AA1 » | HPI FEED WATER TEMPERATURE CONTR | CLOSE | |
| 20GH001AA » | DEAERATOR FILLING WATER ISO VALVE | CLOSE | |
| 20LAC31AP1 » | HPI/P FEED WATER PUMP MOTOR 2350 | OFF CB | |
| 20LAB91AA1 » | HPI/P FEED WATER PUMP10C BALANCING | CLOSE | |
| 20LAB91AA1 » | HPI/P PWP 20C MIN FLOW ON-OFF VALVE | CLOSE | |

Details

| | | | |
|--------------|---|--------------------------------|-------|
| Location: | 20LAB91AA1C » | Locking Device Required State: | CLOSE |
| Asset: | | Apply Sequence: | |
| Description: | HPI/P FEED WATER PUMP10C BALANCING FLOW ISO | Remove Sequence: | |

Attachment 3

Test for New Isolation Plan

Work Order - CUMI/MO/MM/IM Works M_PLANNING

AP-00018 >> HP/IP FEED WATER PUMPA

Parent WO: >>

Job Details

Job Plan: >>

Job Plan Revision #: >>

PM: >>

Safety Plan: >>

Responsibility

Reported By: M_PLANNING

Reported Date: 25/01/22 14:34

Supervisor: >> Work Group: >>

Children of Work Order 65002564

Filter > 0 - 0 of 0

| Sequence | Record | Activity | Details Activity | Location | Status | Record Class |
|------------------------------|--------|----------|------------------|----------|--------|--------------|
| There are no rows to display | | | | | | |

Select Assets Select Locations Select Work Orders New Row

Select Value

☐ Show All Safety Plans

☒ Show Safety Plans for the Current Work Order

☐ Show Safety Plans for the Job Plan of the Current Work Order

Refresh

Filter > 1 - 2 of 2

| Safety Plan | Description |
|-------------|-----------------------|
| SP000013 | SP for Pump Set 4 |
| SP000014 | SP for Dummy Location |

Cancel

Actual Start: 25/01/22 14:35

Actual Finish: >>

Attachment 3

Lock out and Tag out Isolation List

65002564

25/1/256

WO No. 65002564Description: TEST LOTO LISTLocation No.: 10LAC31AP101

IM

Tag Status:WOs Status: WAPPRLOB Key No:

| No. | KKS No | Description | Isolated state | Key Lock | Isolation Lock No | Box No | Joint Lock |
|-------------------------------|--------------|--|----------------|--------------------------|-------------------|--------|------------|
| 1 | 10GHC01AA030 | DEAERATOR FILLING WATER ISOL VALVE 10 DWG S4-33580 | CLOSE | <input type="checkbox"/> | | | |
| <u>Remark: Key No.:</u> | | | | | | | |
| 2 | 10LAB06AA003 | DEAERATOR LEVEL CONTROL VALVE 10 OUTLET VALVE | CLOSE | <input type="checkbox"/> | | | |
| <u>Remark: Key No.:</u> | | | | | | | |
| 3 | 10LAB91AA002 | IP DISCHARGE ISOLATION VALVE | CLOSE | <input type="checkbox"/> | | | |
| <u>Remark: Key No.:</u> | | | | | | | |
| 4 | 10LAB91AA902 | IP DISCHARGE DRAIN VALVE | OPEN | <input type="checkbox"/> | | | |
| <u>Remark: Key No.:</u> | | | | | | | |
| 5 | 10LAB91AA912 | IP DISCHARGE VENT VALVE | OPEN | <input type="checkbox"/> | | | |
| <u>Remark: Key No.:</u> | | | | | | | |
| 6 | 10LAB90AA900 | SUCTION VENT VALVE | OPEN | <input type="checkbox"/> | | | |
| <u>Remark: Key No.:</u> | | | | | | | |
| 7 | 10LAB90AA901 | SUCTION STRAINER DRAIN VALVE | OPEN | <input type="checkbox"/> | | | |
| <u>Remark: Key No.:</u> | | | | | | | |
| 8 | 10LAB91AA001 | SUCTION STRAINER INLET VALVE | CLOSE & OFF CB | <input type="checkbox"/> | | | |
| <u>Remark: Key No.:</u> | | | | | | | |

ข้าพเจ้าขอรับรองว่า อุปกรณ์ระบบ ที่ระบุใน Work Order นี้ ได้ถูกตัดการเชื่อมต่อและตัดการจ่ายไฟฟ้าเรียบร้อยแล้ว

I hereby declare that the equipment system under this Work Order has been isolated from all sources of supply as detail quoted above

Signed: _____ Competent Person (Operator)

Date: _____

Attachment 3

| | | | | |
|----------------------------------|-----------------|---|---------------------------------|--------------------------|
| <u>WO No.</u> 65002364 | | <u>Description:</u> TEXT LOTO LIST | | |
| <u>Location No.</u> 10LAC31AP101 | | IM | <u>Tag Status:</u> | <u>WOs Status:</u> WAFPR |
| 9 | 10LAB91AA002 | HP DISCHARGE ISOLATION VALVE | CLOSE <input type="checkbox"/> | <u>Remark: Key No.</u> |
| 10 | 10LAB91AA009 | MINIMUM FLOW ON-OFF INLET VALVE | | NEW |
| 11 | 10LAB91AA010 | HP/IF FWP10A MIN FLOW ON-OFF VALVE OUTLET VALVE | CLOSE <input type="checkbox"/> | <u>Remark: Key No.</u> |
| 12 | 10LAB91AA015 | WARMING FLOW STRAINER INLET VALVE | CLOSE <input type="checkbox"/> | NEW |
| 13 | 10LAB91AA021 | WATER WARMING FLOW ISOLATION VALVE | CLOSE <input type="checkbox"/> | <u>Remark: Key No.</u> |
| 14 | 10LAB91AA101 | HP/IF FEED WATER PUMP10A BALANCING FLOW ISO. VALVE DWG L4-75932 | CLOSE <input type="checkbox"/> | <u>Remark: Key No.</u> |
| 15 | 10LAB91AA901 | DISCHARGE VENT VALVE | OPEN <input type="checkbox"/> | <u>Remark: Key No.</u> |
| 16 | 10LAB91AA909 | DISCHARGE DRAIN VALVE | OPEN <input type="checkbox"/> | <u>Remark: Key No.</u> |
| 17 | 10LAC31AA911 | HP/IF FWP-10A Suction Casing Drain Valve | OPEN <input type="checkbox"/> | <u>Remark: Key No.</u> |
| 18 | 10LAC31AP101-M0 | HP/IF FEED WATER PUMP A MOTOR 2360 KW TYPE HRN7 507-26E | OFF CB <input type="checkbox"/> | <u>Remark: Key No.</u> |

Attachment 3

WO No.: 65002564 Description: TEST LOTO LIST

Location No.: 10LAC31AP101
IM

Tag Status:

WOs Status: WAPPR

15 10LCA14AA101 HP FEED WATER TEMPERATURE CONTROL VALVE 10
OUTLET VALVE

CLOSE

☐

Remark: Key No.:



บริษัท ชูบุราชบุรี อิเลคทริคเซอร์วิส จำกัด

Chubu Ratchaburi Electric Services Co., Ltd.

128 หมู่ 6 ต.พิบูลทอง อ.เมือง จ.ราชบุรี 70000

128 Moo 6, Tumbol Pikhun-Thong, Amphur Muang, Ratchaburi 70000

Tel. 032-719-300 Fax. 032-719-309



April 11, 2022

Our ref. CRESCO-RPCL-2022-04-018

Attention: Managing Director

Ratchaburi Power Co., Ltd.

1828 Sukhumvit Road

Phrakanong Tai Sub-district,

Phrakanong District Bangkok 10260

รับ นวบ-บพ.
19/10/25
10/10/25

นายชบ. ชิตศักดิ์
บพ.
19/10/25

CC : EGAT Director, RPCL Power Plant

Operation and Maintenance Project

Subject : Submission of Incident report RPC IR- 372 : GT22 Control Oil Supply Diff. Pressure Switch A B Terminal Socket broken.

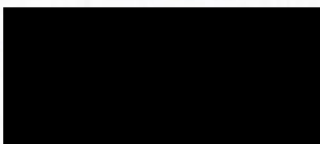
Dear Mr. Boonchai Lersthavorntham,

CRESCO would like to submit the incident report (final) as follows.

- RPC IR-372 : GT22 Control Oil Supply Diff. Pressure Switch A B Terminal Socket broken.

Please see attachment for more details and if you need more information, please feel free to contact us.

Yours sincerely,



Managing Director

รับ บพ.-บพ.

Attachment : - RPC IR-372 : GT22 Control Oil Supply Diff. Pressure Switch A B Terminal Socket broken.

รับทราบ


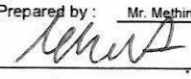
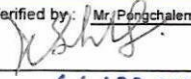
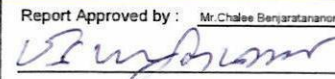



(นายพงศ์เฉลิม ชูพุม)
รท.นบ-บพ.

Asst. Technical Coordinator

Tel: 032-719-300 Ext. 3007

Fax: 032-719-309

|  โรงไฟฟ้าบริษัท ราชบุรีไฟฟ้า จำกัด | | RPCL Incident Inform | |
|--|--|---|--|
| รหัสเอกสาร : F-P-RPC-010-001 | | แก้ไขครั้งที่ 08 | |
| <input type="checkbox"/> Immediate <input checked="" type="checkbox"/> Final Report | | Report No. RPC IR-372 | |
| Title: GT22 Control Oil Supply Diff. Pressure Switch A B Terminal Socket broken | | | |
| 1. Type of Incident (ประเภทเหตุการณ์) | | <input type="radio"/> Class A <input type="radio"/> Class B <input checked="" type="radio"/> Class C (See Part 8) | |
| <input type="checkbox"/> Plant Incident (Fill Part 1) (เหตุการณ์ที่เกิดขึ้นในโรงไฟฟ้า) <input checked="" type="checkbox"/> Accident (อุบัติเหตุ) <input type="checkbox"/> Near Miss (เหตุการณ์หวาดหวิด) <input type="radio"/> Fire (Fill Part 4) (เพลิงไหม้) <input checked="" type="radio"/> Property damage (Fill Part 2) (ทรัพย์สินเสียหาย) <input type="radio"/> Body Injury (Fill Part 2) Party..... (การบาดเจ็บ) <input type="checkbox"/> Environment (สิ่งแวดล้อม) <input type="radio"/> Chemical/ Oil Spillage (Fill Part 5) (สารเคมี/ น้ำมันหก/รั่วไหล) <input type="radio"/> Emission / Waste Water (Fill Part 3) (การปล่อยของเสีย / น้ำเสีย) <input type="checkbox"/> Others (Fill Part 6) (อื่นๆ) | | | |
| 2. Date/ Time Incident happened (วันที่/ เวลา ที่เกิดเหตุการณ์) | | Date/ Time Incident Informed (วันที่/ เวลา ที่แจ้งเหตุการณ์) | |
| Date 15-Jan-22 Time 8.45 | | Date 15/1/2022 Time 13.30 | |
| 3. Place: Block-Unit No. or Name of Place. (สถานที่เกิดเหตุการณ์) | | | |
| <input type="checkbox"/> Block No.1 <input checked="" type="checkbox"/> Block No.2 <input type="checkbox"/> Common <input type="checkbox"/> Not Power Plant Facility <input type="checkbox"/> Gas Turbine No.11 <input checked="" type="checkbox"/> Gas Turbine No.21 <input type="checkbox"/> Restrict Area <input type="checkbox"/> Gas Turbine No.12 <input type="checkbox"/> Gas Turbine No.22 <input type="checkbox"/> Non-Restricted Area <input type="checkbox"/> Steam Turbine No.10 <input type="checkbox"/> Steam Turbine No.20 <input type="checkbox"/> Outside of Power Plant Detail explanation: GT#22 Control oil unit supply diff. pressure switch terminal socket was broken | | | |
| 4. Plant Status before Incident (สถานะของโรงไฟฟ้าก่อนเกิดเหตุการณ์) | | | |
| Date & Time 15/1/2022 08:35 Fuel <input type="checkbox"/> Gas <input type="checkbox"/> Oil AGC <input type="checkbox"/> On <input type="checkbox"/> Off Block 1 load net = 0 MW GT 11 = 0 MW GT 12 = 0 MW ST 10 = 0 MW Block 2 load net = 0 MW GT 21 = 0 MW GT 22 = 0 MW ST 20 = 0 MW | | | |
| 5. Event happened (ลักษณะของการเกิดเหตุการณ์) | | | |
| 8.30 hrs EGAT EMD staff found the GT22 Control Oil Supply Diff. Pressure Switch Terminal Socket broken. 8.40 hrs They found some pipe of scaffolding located very close to the damage point. 8.44 hrs Inform Inspector. Event found by (ผู้พบเหตุการณ์)...Rewat Ruenrawat... Party (หน่วยงาน) ...EMD... Tel. | | | |
| 6. Immediate Action Plan/Taken (ดำเนินการแก้ไขทันที) | | | |
| 1) Informed Inspector to check damage point. 2) Function Test the pressure switch . Presure switch still worked fine. | | | |
| 7. Recommended Actions for long term (ดำเนินการแก้ไขระยะยาว) | | | |
| 1) Purchase the new pressure switches to replace the damaged one. (New PS will receive on June 2022) 2) Review Risk assessment for working at control skid area. SAR was issued and Project manager will warning vendor in every safety training. | | | |
| 8. Notice/Claim to/from outside (ข้อร้องเรียนจากภายนอก) | | 9. Human Performance Related (บุคคลที่เกี่ยวข้อง) | |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No from/to: | | <input type="checkbox"/> Human behavior worksheet (Fill Part 7) (DO NOT SPECIFY INDIVIDUAL NAME) | |
| | | 10. Follow-up Report Required (ติดตามรายงาน) | |
| | | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Due date: | |
| 11. Signature (ลงนาม) | | | |
| Report Prepared by : Mr. Methin Teeranaew | | Report Verified by : Mr. Pengchalem Choopum | |
|  Date: 11 APR 2022 | |  Date: 11 APR 2022 | |
| | | Report Approved by : Mr. Chalee Benjaratananon | |
| | |  Date: 11/4/22 | |

| | | | |
|--|--|---|-----------------|
|  โรงไฟฟ้าบริษัท ราชบุรีเพาเวอร์ จำกัด | RPCL Incident Report (Accident) | | |
| | รหัสเอกสาร : F-P-RPC-010-002-2 | แก้ไขครั้งที่ 08 | |
| <input type="checkbox"/> Immediate | | <input checked="" type="checkbox"/> Final | |
| Report No. RPC IR- 372 | | | |
| Title: GT22 Control Oil Supply Diff. Pressure Switch A B Terminal Socket broken | | | |
| PART 2 ACCIDENT (อุบัติเหตุ) | | <input checked="" type="radio"/> Accident (อุบัติเหตุ) <input type="radio"/> Near Miss (เหตุการณ์หวุดหวิด) | |
| Accident Date (วันที่เกิดอุบัติเหตุ) : 15/1/2022 | | Time (เวลา) : 8.45 | |
| Place of Accident (สถานที่เกิดเหตุ) : GT22 Control Oil Skid | | | |
| Activity Before Accident (ก่อนเกิดอุบัติเหตุ) : GT22 Control Oil Skid inspection | | | |
| 2.1 CASE OF ACCIDENT (กรณีการเกิดอุบัติเหตุ) | | <input type="radio"/> Class A <input type="radio"/> Class B <input checked="" type="radio"/> Class C (See Part 8) | |
| <input type="checkbox"/> Body Injury (การบาดเจ็บ) Type of injury: <input type="checkbox"/> Loss Time <input type="checkbox"/> No LossTime (ประเภทการบาดเจ็บ) <input type="checkbox"/> Disability <input type="checkbox"/> Dead Patient Name : _____ (ชื่อผู้บาดเจ็บ) Party (หน่วยงาน): _____ Treatment: <input type="checkbox"/> Site Clinic <input type="checkbox"/> Hospitalized (การรักษา) Place (สถานที่) : _____ Estimated time to recover : _____ Days (ระยะเวลาการรักษา) | | <input checked="" type="checkbox"/> Property damage (มูลค่าความเสียหาย) Damaged Property : Diff. Pressure Switch A B (ความเสียหายด้านทรัพย์สิน) Estimated Loss: 30,000 Baht (ความเสียหายโดยประมาณ) <input type="checkbox"/> Traffic accident (อุบัติเหตุทางคมนาคม) Damaged Property: _____ (ความเสียหายด้านทรัพย์สิน) Estimated Loss: _____ Baht (ความเสียหายโดยประมาณ) <input type="checkbox"/> Others (Specify): _____ (อื่นๆ) | |
| 2.2 DETAILS OF ACCIDENT (รายละเอียดอุบัติเหตุ) | | | |
| 8.30 hrs EGAT EMD staff found the GT22 Control Oil Supply Diff. Pressure Switch Terminal Socket broken. 8.44 hrs Inform Inspector. | | | |
| Event found by (ผู้พบเหตุการณ์)...Rewat Ruenrawat... Party (หน่วยงาน) ...EMD... Tel. | | | |
| Investigation Plan and Result (ผลการสอบสวนอุบัติเหตุ) | | | |
| Investigation by Professional Safety Officer : Mr.Wichet Poyen Date: 3/12/2021 (การสอบสวนอุบัติเหตุโดย จป.วิชาชีพ) (วันที่) | | | |
| Describe the details of investigation including when,what, how, where etc. (อธิบายรายละเอียดการสอบสวนฯ) According to more parties have a work at Control Oil Skid GT22 area . EGAT team have the internal meeting which work group for face finding. They found that the subcontractor of motor , they have some activity for lifting and movement the control motor but some pipe scaffolding oil pump of obstruct them job. They movement and relocate the pipe by themselves but the locking couplers between horizontal pipe and vertical pipe was not proper. It is a possible cause for horizontal pipe sliding down and hit to the Diff. Pressure Switch if somebody stand on the pipe. | | | |
| Investigation Report shall be attached. (แนบรายงานการสอบสวนฯ) | | | |
| 2.3 Root cause or Possible cause of incident and Countermeasures (สาเหตุที่เป็นไปได้ของเหตุการณ์ที่เกิดขึ้นและมาตรการป้องกัน) | | | |
| Root Cause (สาเหตุ) (Describe the cause and the counter measures proposed in/after the investigation) Purchase the new pressure switches to replace the damaged switches. (new PS will receive on June 2022) | | | |
| For Prevention what should be done (แนวทางการป้องกันการเกิดซ้ำ) Review Risk assessment for working at control skid area. BAAR was issued and Project manager will warning vendor in every safety training. | | | |
| | | Responsible by | Project manager |
| | | Responsible by | Date |
| | | Responsible by | Date |
| Other recommendations (ข้อเสนอแนะอื่นๆ) | | Responsible by | Date |
| | | Responsible by | Date |
| | | Responsible by | Date |
| 2.4 Attachment (เอกสารแนบ) | | | |
| Following data shall be attached. (1) Picture | | | |

Incident Image

Diff Pressure Switch A



Diff Pressure Switch B





Attachment 1

