सत्यमेव जयते

**EASTERN REGIONAL POWER COMMITTEE**

**14, GOLF CLUB ROAD, TOLLYGUNGE, KOLKATA-700 033**
**Ph: 033-24239651/24239659 # Fax: 033-24239652/53 # Web: www.erpc.gov.in**

---

**AGENDA FOR 50th COMMERCIAL SUB-COMMITTEE MEETING OF ERPC TO BE HELD ON 08.01.2024 (MONDAY)**

**AT 10:30 HRS THROUGH MICROSOFT TEAMS ONLINE PLATFORM.**

**ITEM NO. A1: Confirmation of the minutes of the 49th Commercial Sub-Committee meeting held on 28.07.2023.**

The minutes of the 49th Commercial Sub-Committee meeting was uploaded on ERPC website.

**Members may confirm the minutes of the 49th Commercial Sub-Committee Meeting.**

## PART B: ITEMS FOR DISCUSSION

**ITEM NO. B.1: Erroneous Meter Recording of MVAR_Low for 400kV RTPS-Ranchi PG Ckt#3 - Agenda of DVC.**

Background:

Earlier the Metering of 400kV RTPS – Ranchi PG Ckt # 2 & and 3 was being carried out with the meter data of Ranchi PG end for the purpose of Deviation Settlement and Reactive Energy Accounting. However, as per the decision taken in the 206th OCC Meeting of ERPC, the energy accounting of these Ckts has been carried out with the RTPS end meter since 04th September 2023.

Issue:

Since 04-09-2023 onwards, it has been observed that DVC has been penalized for each week on account of MVAR_Low recording by RTPS end meter of 400kV RTPS-Ranchi PG Ckt#3. Whereas its parallel Ckt i.e. 400kV RTPS-Ranchi PG CKt#2 has recorded MVARh_High on each week. From SCADA data also, it was verified that the RTPS end Bus voltage has never touched 388 kV, in fact not fallen below 400kV.

Upon investigation by the Metering Cell, it was learnt that there was some issue in PT circuitry and the same was attended and rectified on 06-10-2023.The Confirmation mail of the Metering Cell on rectification of the issue has been attached herewith. It has been observed that from 09-10-2023 onwards such erroneous MVAR_Low record has not been reflected in the Reactive Energy Account Statements.

Request:

The MVAR_Low recording of 400kV RTPS-Ranchi PG Ckt#3 in the Reactive Energy Statements issued from 04-09-2023 to 08-10-2023 thus appears to be erroneous and the same can be verified from SCADA data also (The SCADA data from 04-09-2023 to 10-09-2023 is attached at **Annexure B.1**).

Therefore, it is requested to disregard the MVAR_Low recording of the said Ckt for the period 04-09-2023 to 08-10-2023 and accordingly revise the Reactive Energy Account Statement i.r.o. DVC.

**DVC may explain. CCM may discuss.**

**ITEM NO. B.2: Agenda by Powergrid ER-II.**

**B.2.1. Proposal for procurement of Spare ICT (Both 500 MVA & 315 MVA) for Eastern Region.**

1. As per CEA- Spare Norms (July 2020) for maintaining spares, each Region must maintain One Each number single/3-Ph units of each rating for ISTS system. POWERGRID has been maintaining the spares as per norms. However, as per recent developments and changed scenario it is very important to maintain spares to meet any contingent situations for other constituents.
2. As such making entire fleet of operation of Transformers more reliable, adequate number of spares are to be maintained as Regional Pool to be decided. In recent past, few spare Transformers are utilized in Non-ISTS system, making the regional Pool NIL.
3. In view of above the followings are proposed:
   a) New 400/220/33KV, 500MVA ICT to be procured to be located at POWERGRID Maithon (Existing Regional Spare 500MVA to be used as ICT-VII and to be kept at POWERGRID Subhashgram).
   b) New 400/220/33KV, 315MVA ICT to be procured to be located at POWERGRID Binaguri SS.

| STATE | VOLTAGE | SIZE | STORAGE PLACE |
|---|---|---|---|
| WEST BENGAL | 400/220/33 KV | 500 MVA | MAITHON |
| | | 315 MVA | BINAGURI |

4. Considering the above, tentative commercial implications considering varied size Transformers with foundation are deliberated below:

| EQUIPMENT | PER UNIT PRICE (18% GST INCL.) | TOTAL QTY | TOTAL PRICE |
|---|---|---|---|
| 400/220/33KV, 500 MVA | 279067108 | 1 | 279067108 |
| 400/220/33KV, 315 MVA | 225358826 | 1 | 225358826 |

However, on in principle approval, final commercial implications shall be put up in forthcoming CCM.

In the 208th OCC Meeting, WBSETCL representative submitted as the ICT proposed to take from Power Grid on temporary basis from Malda for Jeerat 400 kV sub-station (WBSETCL) is

expected to return within 6 months of installation, hence even as per CEA - spare norms (July 2020) the requirement of buying new 315 MVA ICT is not justified because the transformer will be returned much before the delivery of the new transformer, also the 500 MVA ICT maintained as cold spare at Maithon, proposed to be commissioned at Subhashgram (PG) substation by Power Grid as interim measure may not be taken as permanent rather may be returned to Powergrid after commissioning of 6th ICT at Subhashgram under CESC head or even after observing the loading pattern in Summer 2024.He further asserted that every capital expenditure having direct impact on consumer tariff should be deployed judiciously rather by creating "spare of spares". Powergrid representative submitted that transformer procurement being a lengthy and tedious process, it is always better to replenish the spare ICTs in regional pool thereby ensuring better operational flexibility in ER grid.

OCC advised Powergrid to proceed with replenishment process till the spares from Jeerat S/S and Subhashgram S/S get returned to regional pool. OCC also opined that every utility including Odisha, West Bengal, Jharkhand must maintain spare ICT as per CEA norms. WBSETCL representative consenting to view of OCC, apprised that presently board approval for procuring spare ICT is under process. DVC representative submitted that only 6 out of 10 ICTs being presently in service, adequate spare is available at their end.

In reference to above, spare ICT (Both 315 MVA & 500 MVA) has already been approved technically. Details financial implication will vary depending on time of procurement as all component costs are highly variable in nature.

As such, in line with earlier approval it is proposed to concur in-principal approval of 02 No's ICT as proposed in 208th OCC for further concurrence in forthcoming TCC/ERPC: -

**CCM may approve.**

**B.2.2. Installation of Transmission Line Arrestor in 220 KV Lines in North Bengal.**

Based on 48th CCM & 49th ERPC Meeting approval, earlier approved value for Installation of Transmission Line Arrestor in 220kV Lines in North Bengal was noted as Rs 6.5 Cr. The entire work is already completed and accordingly, the actual expenditure incurred for the said work comes to Rs. 7.16 Crores which may please be ratified by members of CCM please.

**CCM may approve.**

**B.2.3. Cost recovery against AMR expenditure/SEM related costs in ER-II from 01.03.2019 to 15.07.2023 for various phases of implementation and associated activities pertaining to Software/Hardware refreshment and upgradation of AMR-Revised Cost Expenditure recovery-AMR.**

As per minutes of 49th ERPC, approved value of AMR expenditure was provided as Rs. 6,01,20,823/-. However, after actual booking and also after including GST/Consultancy charges the revised value comes to Rs. 7,87,31,547- (Rs. Seven Crore eighty-seven lacs thirty-one thousand five hundred forty-seven only).

Bifurcation given below for ratification: -

| Project | LOA#/ SAP PO | Total |
|---|---|---|
| AMR Phase1&2 | ER-II/KOL/C&N/I-582/P-747/870/3676 Dated: 06-Nov-2012 /ER-II/KOL/C&N/P-747/AMEND-IV/748/2425 Dated: 02-Sep-2014 **(SAP PO-9000007968 & 5200022239)** | 21,77,392 |
| AMR Phase-3 | ER-II/KOL/CS/I-1358/P-1398 Dated: 27-Oct-2016 ER-II/KOL/CS/I-1358/P-1398/AMEND-III/442 Dated: 10-Jul-2018 **(SAP PO- 5100014415)** | 39,87,747 |
| AMR Phase-4 | ER-II/KOL/CS/I-2446/P-2420/1929 **Dated:** 20-Jul-2020 ER-II/KOL/CS/I-2446/P-2420/AMEND-II/4374 **Dated:** 05-Jul-2021/ER-II/KOL/CS/I-2446/P-2420/AMEND-III/6493 **Dated:** 07-Jun-2022 **(SAP PO-5100032889)** | 1,30,19,265 |
| AMR Phase-1&2 AMC renewal | ER-II/KOL/CS/I-2724/P-2702/4285 Dated: 02-Jun-2021 **(SAP PO- 5100035446)** | 2,56,33,881 |
| AMR LAN Integration work | ER-II/KOL/CS/I-3499/P-3414/6841 dated 01.09.2022 **(SAP PO- 5100043386)** | 27,40,552 |
| AMR Phase-3 AMC renewal for 249 SEM | ER2/NT/S-AMC/DOM/E00/22/00692/1000000986/I-3645/P-3556/8045 **Dated** 29.12.2022 **(SAP PO- 5200059035)** | 27,21,270 |
| AMR data center hardware and software application refreshment | ER-II/KOL/CS/I-3370/P-3289/6577 Date: 24.06.2022 (SAP PO- 5100041788) | 1,58,12,000 |
| Transportation of Smart Meter to Binaguri | SAP PO - 4800017144 | - |
| Mobile data for AMR | SAP PO - 5200033984 | 1,44,997 |
| Mobile data for AMR | SAP PO - 5200037273 | 1,91,054 |
| Mobile data for AMR | SAP PO - 5200054713 | 2,57,832 |
| Mobile data for AMR | SAP PO - 5200054715 | 2,05,724 |
| | **Total** | 6,68,91,714 |
| | Consultancy Fees @ 15% | 1,00,33,757 |
| | GST on Consultancy Fees @ 18% | 18,06,076 |
| | Grand Total | 7,87,31,547 |

**CCM may approve.**

**B.2.4. Proposal for procurement of Reactor spares (cold spares) for Eastern Region – Powergrid ER-II.**

In Eastern Region-II following Reactors are in service at present as POWERGRID asset:

| STATE | VOLTAGE LEVEL | CAPACITY | IN SERVICE (In No) | Number of Spares available (In No) |
|---|---|---|---|---|
| WEST BENGAL | 400 KV | 125 MVAR | 13 | NIL |
| | | 80 MVAR | 07 | NIL |
| | | 63 MVAR | 05 | NIL |
| | | 50 MVAR | 08 | 01 at Maithon |
| Odisha | 400 KV | 125 MVAR | 15 | 01 at Angul |
| | | 80 MVAR | 08 | 01 at Rourkela |
| | | 63 MVAR | 07 | NIL |
| | | 50 MVAR | 06 | 01 at Rourkela |
| SIKKIM | 400 KV | 80 MVAR | 02 | NIL |
| | 220 KV | 31.5 MVAR | 02 | NIL |
| BIHAR | 400 KV | 125 MVAR | 16 | NIL |
| | | 80 MVAR | 12 | NIL |
| | | 63 MVAR | 11 | NIL |
| | | 50 MVAR | 10 | 01 at Biharsharif |
| JHARKHAND | 400 KV | 125 MVAR | 8 | NIL |
| | | 80 MVAR | 3 | NIL |
| | | 63 MVAR | 2 | 01 at Daltonganj |
| | | 50 MVAR | 8 | 01 at Jamshedpur |

However, apart from 400 KV, 50 MVAR Reactor at Maithon SS, no other spare Reactor are available till date. As per CEA spare norms (circulated in July-2020, refer page-18/19), for maintaining spares under GST regime, each state should be provisioned with respective sized Reactor. Accordingly, as per available sizing following Reactors are required at following locations: -

| STATE | VOLTAGE | SIZE | STORAGE PLACE |
|---|---|---|---|
| WEST BENGAL | 400 KV | 125 MVAR | DURGAPUR SS |
| | | 80 MVAR | BINAGURI SS |
| | | 63 MVAR | BINAGURI SS |
| SIKKIM | 400 KV | 80 MVAR | RANGPO SS |
| | 220 KV | 31.5 MVAR | NEW MELLI SS |
| BIHAR | 400 KV | 125 MVAR | BIHARSARIFF SS |
| | | 80 MVAR | PATNA SS |
| | | 63 MVAR | MUZAFFARPUR SS |
| JHARKHAND | 400 KV | 125 MVAR | NEW RANCHI SS |
| | | 80 MVAR | RANCHI SS |
| ODISHA | 400 KV | 63 MVAR | ROURKELA SS |

All above Reactors will be kept as regional spare and based upon urgency the same shall be utilised in ISTS system and as per CEA spare norms in state level.

Members may discuss and approve the technical requirements for further submission of cost data to subsequent meetings.

As per decision taken vide agenda point-B11 of 202nd OCC, forum agreed of the proposal for procurement of spare Reactor in ER as per CEA guideline. Further in minutes it is stated to update the detail cost implications in 49th CCM meeting, for deliberations.

Accordingly, details work out for tentative cost implications done and total value comes as, Rs. 111,52,97,192/- (RS. ONE HUNDRED AND ELEVEN CRORES FIFTY-TWO LACS NINETY-SEVEN THOUSAND ONE HUNDRED NINETY-TWO ONLY). Details cost break up given for reference purpose.

In the 49th CCM Meeting, West Bengal representative informed that the cost of keeping spare reactor for eastern Region is very high and procurement plan should be implemented in phase wise, so that financial burden on beneficiaries should be less. After detailed deliberation, CCM opined that the required number of spare reactors may be again deliberated in the OCC.

**CCM may discuss.**

**B.2.5. Approval for re-conductoring in 220kV Lines (more than 35 years in service) commissioned under CTS.**

The transmission network build under CTS scheme was commissioned in mid of 1980's. List of lines are tabulated below: -

| Sl. No. | Name of TL | Total Length of Line (in KM) | Route Length of Line(in KM) under POWERGRID | Name of conductor | Year of commissioning | Remarks |
|---|---|---|---|---|---|---|
| 1 | 220kV D/C Birpara-Chukha TL | 70 | 36 | Zebra | 1986 | |
| 2 | 220kV D/C Birpara-Alipurduar TL | 57.5 | 57.5 | Zebra | 1987 | |
| 3 | 220kV D/C Siliguri-Kishanganj TL | 108.26 | 108.26 | Zebra | 1986 | |
| 4 | 220kV D/C Dalkhola-Kishangnaj TL | 30.96 | 30.96 | Zebra | 1986 | |
| 5 | 220kV D/C Malda-Gazole TL | 18.41 | 16.49 | Zebra | 1986 | |
| 6 | 220kV D/C Dalkhola-Gazole TL | 99.24 | 97.52 | Zebra | 1986 | |
| 7 | 220kV D/C Birpara-Binaguri TL | 80 | 80 | Zebra | 1986 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 8 | 220kV D/C Siliguri-Binaguri TL | 6 | 6 | Zebra | 1986 | |
| 9 | 220kV S/C Birpara-Malbase TL | 41 | 38 | Zebra | 1988 | |
| | **Total** | | **470.73** | | | |
| 10 | 220kV D/C Alipurduar-Salakati TL | 101 | 101 | Zebra | 1987 | Re-conductoring work is in progress under NERSS-XII |

In most of the above-mentioned lines, the conductor damage from VD, MSCJ and repair sleeve, jumper, dead ends etc. have been noticed at several places. The damage might be occurring due to ageing of the conductors & earth-wire due to natural wear & tear. Also, conductor and earth wire getting snapped during seasonal temperature changes. Some snaps of sections of lines where breakage has been reported are enclosed.

The line tripping due to conductor & earth-wire snapping is gradually increasing. (2 Nos. conductor snapping incident occurred in 220kV Birpara-Binaguri Ckt-2 in the month of October-23 itself) In addition to the line outages which is severely deteriorating the transmission availability, it creates potential risk of any severe accident/hazard in the nearby area due to snapping of Conductor/Earth-wire. Further, any incident of conductor/earth-wire snapping at major crossings (Railway, NH X-ings) may lead to undesired safety hazard as well as damage to public/national property. List of tripping in said lines due to conductor & earth-wire breakage is enclosed.

All the above-mentioned lines are more than 35 years in service so have completed useful life as per CERC regulation. Considering the increase in conductor & earth-wire snapping incidents, the issue was taken up during 209th OCC Meeting. Upon detail discussion during the 209th OCC Meeting, OCC forum advised POWERGRID to submit a detailed survey report along with health assessment report of conductor installed in old 220kV Lines commissioned under CTS. Accordingly, vide mail dated 12.12.2023, Powergrid ER-II has shared detail test report of old 220kV Line conductor carried out by NSIC Howrah along with detail survey report. From the test report, it can be observed that the conductor sample has failed in mostly all technical parameters as tabulated below: -

| Sl No. | Tests performed | Observation/Findings | Remarks |
|---|---|---|---|
| 1 | Freedom from defects (Visual Inspection) | Conductor found blackened & surface not smooth | Condition Poor |
| 2 | Surface Condition Test | Upon applying 50% of UTS Load, the diameter of the conductor measured at 4 places are more than the sum of minm. Specified diameter of the individual Al & Steel strands | Failed |
| 3 | Ultimate Breaking Load (Whole conductor & individual Aluminium Strands also) | Conductor strength found (114.25kN) way below the minm. UTS requirement of 130.32kN | Failed |
| 4 | DC Resistance test | Average value of resistance observed (0.12846 ohm/KM ) is way above the Max. allowable DC resistance (0.06868 ohm/KM) of conductor as per TS. | Failed |

During 210th OCC Meeting, OCC forum technically agreed to the above proposal.

In view of above, it is proposed to consider the re-conductoring & earth-wire replacement of 220kV Lines commissioned under CTS under the ADDCAP 2024-2029 tariff block of Chukha Transmission System. A tentative cost for carrying out the re-conductoring work with HTLS conductor & Earth-wire replacement in above mentioned 9(Nine) lines 470.73 KM route length is approx. Rs. 281 Crores.

**CCM may discuss.**

**ITEM NO. B.3: AMR Phase-5 implementation in Eastern Region: Powergrid**

In Eastern Region, there have been 4 AMR Phases package awarded previously. All the AMR Phases are in AMC support now. In the AMR Phase-4 implementation period, Data Centre Hardware Software refreshment also being completed.

At present in ER, few Meters/Stations are yet to be integrated with AMR system. Most of them are new stations or new Feeders. As per mail received from ERLDC dated 29th Sep 2023, a list is shared for such meters which required to be integrated in existing AMR server. As per SEM details shared by ERLDC, total 320 no of Meters has to be integrated with the AMR. Out of which, 242 Meters are already present in Sub Stations, and another 78 Meters has been kept for upcoming/future New Sub Stations or Feeders.

In view of above, for integration of subject SEMs at AMR, a separate LOA/Award to be placed to carry out the job (Phase-5). In line with the requirement, the same has been shared with TCS, for estimation purpose. Considering the requirement received from ERLDC, total 65 DCU Hardware has been estimated. (50 for the already present Meters, and 15 kept as future for upcoming stations). Additionally, other hardware like Cables, PVC Pipe, Fiber Optical cable etc. have been provisioned as per the estimation.

One Rack Server with Windows Operating System and One 24 ports Network Switch have been considered in this program. These items will be installed at ERLDC Data Centre. These will be working as a redundant backup system and Data Repository for entire AMR. As the number of Meters getting increased, redundant data repository is a must for proper system operation.

**Project timeline has been considered as below (28 Months)**

| **M1 (Dec-23) M6 (May-24)** | **M7 (Jun-24) M18 (May-25)** | **M19 (Jun-25) M28 (Mar-26)** |
|---|---|---|
| 06 months, For Supply & implementation | 12 months Warranty Support | 10 months comprehensive AMC Support |

The timeline has been considered expecting that, LOA will be awarded, and work will get started in Dec-2023 1st week. The actual timeline will be set as per the actual date of LOA placement.

The end date of AMC support is considered (will be kept) till 31-Mar-2026. As all the other AMR Phases, AMC is getting ended on the same date i.e. 31-Mar-2026, for making Phase-5 also a

concurrent one, with other ongoing packages. From Apr-26 onwards, one single package will be placed for AMC of all the Meters.

The new AMR system will be installed at those stations only, where the OPGW Fiber and LAN Setup is available. There will be no GPRS based data communication, which will be considered in AMR implementation as per CEA/CERC Cyber Security Guideline. It has been assumed that all the locations considered here for AMR integration has active LAN port. If any location is not having LAN connectivity or OPGW work is ongoing, the same will be discussed in upcoming meetings such that same will be available during AMR installation.

Considering all the above, M/S TCS has given their commercial offer which has total value of INR 2,60,72,054.00 /- (Rs. Two crore sixty lacs seventy-two thousand and fifty-four only) without Taxes. (Annexure- B.26)

Like all previous LOAs of AMR, it is requested to give in principle approval for placing the order to M/S TCS on a single tender / nomination. Based on OCC approval, POWERGRID shall carry out necessary processing for further placement of LOA after carrying out necessary negotiation with M/S. TCS. Negotiated final value shall be placed in forthcoming CCM for further deliberation & approval.

In 208th OCC meeting, Powergrid representative submitted that in phase-5 of AMR integration, 240 meters out of 320 meters to be integrated, are presently installed in the substations and rest 80 meters are kept as provision for upcoming substations. He also apprised that meters to be AMR integrated in phase-5 will be equipped with DCU, backup data centre as new addition and robust LAN connectivity. He further added that meters will be installed in only those substations equipped with OPGW connectivity and LAN setup. In this regard, it was informed to the forum that commercial offer has been received for AMR phase-5 implementation from M/S TCS on single tender basis and presently negotiation is under process.

OCC gave in principle approval for the AMR phase-5 implementation and advised Powergrid to expedite negotiation process with M/S TCS and place the same in upcoming Commercial Sub-committee meeting for relevant discussion.

In the 208$^{th}$ OCC meeting, Powergrid representative submitted that in phase-5 of AMR integration, 240 meters out of 320 meters to be integrated, are presently installed in the substations and rest 80 meters are kept as provision for upcoming substations. He also apprised that meters to be AMR integrated in phase-5 will be equipped with DCU, backup data centre as new addition and robust LAN connectivity. He further added that meters will be installed in only those substations equipped with OPGW connectivity and LAN setup. In this regard, it was informed to the forum that commercial offer has been received for AMR phase-5 implementation from M/S TCS on single tender basis and presently negotiation is under process.

OCC gave in principle approval for the AMR phase-5 implementation and advised Powergrid to expedite negotiation process with M/S TCS and place the same in upcoming Commercial Sub-committee meeting for relevant discussion."

**Powergrid ER-II may update. Members may approve.**

**ITEM NO. B.4: Long Outage of reactor at Jeerat S/s imposing high VAR charges on all DISCOMs of West Bengal – WBSETCL.**

The 50 MVAR Reactor 2 in Jeerat (WBSETCL) 400 KV sub-stn owned and maintained by PG since beginning. This reactor is out of service from 23.04.23 due to high winding temperature. In absence of this reactor, voltage of Jeerat (WBSETCL) point was crossing 417 KV during winter off peak hours and WBSETCL is paying even up to the extent of 1.25 Lakhs per week as MVAR charges for the Jeerat point only.

As for some technical issues developed, the said reactor was taken out of bus earlier and as Power Grid has failed to rectify the same before winter (in last 8 months), WBSETCL and state DISCOMs are paying the amount as MVAR charges for Jeerat point without having any fault at their part, so the Jeerat point VAR amount may please be relieved for WBSETCL, if Power grid fails to bring back the reactor in service shortly. Power Grid may please intimate the up-to-date status and the probable date of return of the reactor in service.

In 210th OCC meeting, WBSETCL representative submitted that in event of long outage of 50 MVAR reactor at Jeerat S/S, huge amount of weekly VAR charges are being imposed on WBSETCL and state DISCOMs. In this regard, he requested Powergrid ER-II to restore the 50 MVAR reactor to service at the earliest. In case of failure by Powergrid ER-II to bring the reactor to service at Jeerat S/S on time, WBSETCL appealed to OCC forum for waiving off VAR charges at the Jeerat (400 kV) point.

Powergrid ER-II representative vide mail dated 23.12.2023 apprised that the subject Reactor being aged more than 35 Years old, is subjected to many snags and based upon the information received from Jeerat site, normally time to time action is taken. After 23.04.23, the subject Reactor has been kept under Voltage Regulation causing no possibility to check the activity (Repairing done). Further when the reactor was again tried to put into operation during present winter, different problems were observed for which necessary actions are already undertaken and expected to be finished by 15.01.2024.

OCC advised Powergrid ER-II to expedite actions for restoration of 50 MVAR reactor at 400 kV Jeerat (WBSETCL) S/S and also opined that the request of WBSETCL for waiving off of VAR charges may be be taken up in the next CCM meeting for necessary deliberation.

WBSETCL representative submitted that in event of long outage of 50 MVAR reactor at Jeerat S/S, huge amount of weekly VAR charges are being imposed on WBSETCL and state DISCOMs. In this regard, he requested Powergrid ER-II to restore the 50 MVAR reactor to service at the earliest. In case of failure by Powergrid ER-II to bring the reactor to service at Jeerat S/S on time, WBSETCL appealed to OCC forum for waiving off VAR charges at the Jeerat (400 kV) point.

Powergrid ER-II representative vide mail dated 23.12.2023 apprised that the subject Reactor being aged more than 35 Years old, is subjected to many snags and based upon the information received from Jeerat site, normally time to time action is taken. After 23.04.23, the subject Reactor has been kept under Voltage Regulation causing no possibility to check the activity (Repairing done). Further when the reactor was again tried to put into operation during present winter, different problems were observed for which necessary actions are already undertaken and expected to be finished by 15.01.2024.

OCC advised Powergrid ER-II to expedite actions for restoration of 50 MVAR reactor at 400 kV Jeerat (WBSETCL) S/S and also opined that the request of WBSETCL for waiving off of VAR charges may be be taken up in the next CCM meeting for necessary deliberation."

**WBSETCL may update.**

**ITEM NO. B.5: Monthly Billing and Payment of ERLDC FEES AND CHARGES of Distribution Licensees, Buyers and Sellers on the basis of their GNA quantum within the State of West Bengal. – WBSETCL.**

The bill for the ERLDC Fees and charges for the month of December, 2023 has been raised to The SLDC, WBSETCL vide Ref : ER/2023-24/0467 Dated: 01-01-2024 of the ERLDC.

In this regard, SLDC, WBSETCL has noted following observations:

- As per clause (c) of regulation 30 of (Fees and charges of Regional Load Despatch Centre and other related matters) Regulations 2019 of Hon'ble CERC and the order no 17/SM/2023 dated 30.11.23 of Hon'ble CERC, LDC charges distribution licensees, buyers and seller shall be calculated on the basis of their GNA quantum.

- As per the regulation 34.1 of (Fees and charges of Regional Load Despatch Centre and other related matters) Regulations 2019 of Hon'ble CERC "Bill shall be raised for LDC charges on monthly basis by Power System Operation Company in accordance with these regulations."

- Regulation 31.(8) of (Fees and charges of Regional Load Despatch Centre and other related matters) Regulations 2019 of Hon'ble CERC states that " The respective SLDC shall be the nodal agency for collection of monthly LDC charges payable to the concerned Regional Load Despatch Centre(RLDC), from the distribution licensees and other RLDC users in the State. After collecting the monthly LDC charge the concerned SLDC shall deposit the same into the account of the concerned RLDC. The RLDC users in the state shall have to option to make payment of monthly RLDC charges into the account of concerned RLDC or they may choose to pay the same through the respective SLDCs"

Now as per provisions of clause no 18.1.(e) of (Connectivity and General Network Access to the inter-state Transmission System) Regulations, 2022 SLDC, WBSLDC has segregated deemed GNA of West Bengal to Three intra-state entities namely 1) WBSEDCL 2) CESC and 3)IPCL and intimated to STU, Nodal Agency, RLDC and NLDC vide memo no: SLDC/HOW/EA-27/2022-23/659 dated 28.10.2022.

In absence of any modalities of segregation of monthly RLDC fees and charges among the Intra state GNA grantees with in the state of West Bengal, it is requested that appropriate modalities may kindly be framed for raising the bill to the Distribution Licensees/ RLDC users in the State.

**WBSETCL may update. Members may discuss.**

**ITEM NO. B.6: ERLDC Fees and Charges Provisional PLI Bill for FY 2022-2023 along with adjustment of Approved PLI Charges for FY 2021-2022. – WBSETCL.**

ERLDC Fees and Charges Provisional PLI Bill for FY 2022-2023 along with adjustment of Approved PLI Charges for FY 2021-2022 has been raised to The SLDC, WBSETCL vide Ref : ER/2022-23/0678 Dated: 22-12-2023 of the ERLDC.

In this regard, SLDC, WBSETCL has noted following observations:

- As per the regulation 34.1 of (Fees and charges of Regional Load Despatch Centre and other related matters) Regulations 2019 of Hon'ble CERC "Bill shall be raised for LDC charges on monthly basis by Power System Operation Company in accordance with these regulations."
- Regulation 31.(8) of (Fees and charges of Regional Load Despatch Centre and other related matters) Regulations 2019 of Hon'ble CERC states that " The respective SLDC shall be the nodal agency for collection of monthly LDC charges payable to the concerned Regional Load Despatch Centre(RLDC), from the distribution licensees and other RLDC users in the State. After collecting the monthly LDC charge the concerned SLDC shall deposit the same into the account of the concerned RLDC. The RLDC users in the state shall have to option to make payment of monthly RLDC charges into the account of concerned RLDC or they may choose to pay the same through the respective SLDCs"
- During the Financial Year 2021-2022 and 2022-23 the bill for RLDC Fees and charges was directly being raised to the concerned DIC by ERLDC.
- SLDC, WBSETCL does not have any regulatory guideline regarding raising the Provisional PLI Bill for FY 2022-2023 along with adjustment of Approved PLI Charges for FY 2021-2022 to the concerned entity within the State of West Bengal.

In absence of any guideline in this regard, it is requested that appropriate modalities may kindly be framed for raising the provisional PLI (Performance Linked Incentive) bill and Approved PLI charges bill to the concerned Distribution Licensees.

**WBSETCL may explain. Members may discuss.**

**ITEM NO. B.7: Agenda by JBVNL.**

In reference to the RTA month of DEC-2023 which is published by NLDC and accordingly we have raise the following concern in CTU Bill -1 month of DEC-2023

The transmission charged 276 MW extra in DEC-2023 by PGCIL. This includes the total GNA quantum for Jharkhand (1040 +276 = 1316 MW). However, total allowed GNA by CERC is 1110 MW for Jharkhand.

The waiver of transmission charges is calculated 17.98 % which is obtained against GNARE. However, the same is also applicable for Railways whereas only JBVNL buys energy from renewable sources.

As per sharing regulation SLDC bifurcate the allowed GNA into 72 & 1038 MW for railway &

Jharkhand respectively. However, PGCIL considered only 70 MW GNA for railway in calculation of transmission charges.

**JBVNL may explain. Members may discuss.**

**ITEM NO. B.8: Agenda by ERLDC.**

**A. Default details of constituents pertaining to Deviation, Reactive, Fees and Charges.**

The details of major defaulters as on 04.01.2024 considering the ERPC bills dated 28/12/23 (Wk- 11/12/23 to 17/12/23) for DSM charges and Reactive charges are tabulated below- -

**Jharkhand:**

| | **JBVNL** |
|---|---|
| **DSM (in Cr)** | ₹ 54.54 Cr /- |
| **Reactive (in Cr)** | - |
| **LC** | LC Partially opened of ₹ 1.39 Cr. |
| **Due date of expiry of LC** | 14-03-2024 |
| **Reconciliation** | DSM: Pending from Q2 of FY 2020-21 |
| | Reactive: Pending from Q1 of FY 2019-20 |
| | FnC: Pending from Q1 of FY 2021-22 |

**Bihar:**

| | **Bihar** |
|---|---|
| **DSM (in Cr)** | ₹ 29.42 Cr /- |
| **Reactive (in Cr)** | ₹ 0.77 Cr /- |
| **LC** | LC of ₹ 2.213 Cr expired on 12/11/2023 |
| **Due date of expiry of LC** | - |

**Sikkim:**

| | **Sikkim** |
|---|---|
| **DSM (in Cr)** | ₹ 22.95 Cr /- |
| **Reactive (in Cr)** | - |
| **LC** | No Valid LC |
| **Due date of expiry of LC** | - |
| **Reconciliation** | DSM: Pending from Q2 of FY 2019-20<br>Reactive: Pending from Q1 of FY 2019-20<br>FnC: Pending from Q1 of FY 2021-22 |

Further, the details of other pool members are enclosed as **Annexure-I** and **Annexure-II.**

**JBVNL & SIKKIM may confirm the program for payment of outstanding dues.**

**B. Interest due to delayed payment of deviation charges/RRAS**

Due to the delayed payment of deviation charges in the DSM Pool interest was computed for all the DSM Pool Members for FY 2020-21. The current outstanding of OPGC is **0.24 lakhs**.
The status of interest is enclosed in **Annexure-III.**

**OPGC may update the status of the same.**

**C. Opening of LC by ER Constituents for DSM Payments.**

The details of LC amount required to be opened, as per ERLDC letter dated 21/04/2023 (and reminder letter dated 18/12/2023), for default in FY 2022-23 by ER constituents is given in table below -

| Sl No | ER Constituents | LC Amount (110% of Average weekly Deviation Charge liability) | Due date of expiry | Remarks |
|---|---|---|---|---|
| 1 | BSPTCL | 404.55551 | | No Valid LC |
| 2 | JUVNL | 347.61817 | 13-03-2024 | LC opened for ₹ 139,64,455 /- |
| 3 | DVC | 265.67154 | - | No Valid LC |
| 4 | Sikkim | 46.0397 | - | No Valid LC |
| 5 | CHUZACHEN | 2.46842 | - | No Valid LC |
| 6 | GMR | 20.05681 | - | No Valid LC |
| 7 | JITPL | 30.09467 | - | No Valid LC |
| 8 | JLHEP | 25.22302 | - | No Valid LC |
| 9 | BRBCL | 36.77389 | - | No Valid LC |
| 10 | Tashiding | 8.3789 | - | No Valid LC |

**Further, the details of other pool members are enclosed as Annexure-IV.**

**D. Status of PSDF.**

An amount of total 5.61 Cr (Reactive charges) from the Reactive Pool account has been transferred to PSDF after the 49th Commercial sub-committee meeting held on 28.07.2023. With this the total amount of around 2187.32 Cr has been transferred to PSDF so far. The breakup details of fund transferred to PSDF (till 04.01.24) is enclosed in **Annexure V.**

**This is for information to the members.**

**E. Reconciliation of Pool Accounts.**

The reconciliation statements of DSM, Reactive, TRAS(RRAS), and SRAS(AGC) charges are being issued by ERLDC on quarterly basis and statements are being sent to the respective constituents and also being uploaded at ERLDC website at https://erldc.in/market-operation/dsmreconcilation/. The status of reconciliation as on 04.01.2024 is enclosed in **Annexure- VI and VII.**

**Constituents are requested to take necessary action for the signing of pending reconciliation statements.**

**F. Short term Open Access.**

**1. For STOA Payments made to SLDC/STU and CTU.**

The reconciliation statements of STOA payments of Q-2 for FY 23-24 have been sent to the DVC, OPTCL, BSPTCL, Jharkhand, Andhra Pradesh, Himachal Pradesh, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Uttar Pradesh, WBSETCL, CHHATTISGARH, Delhi, JAMMU & KASHMIR, Gujrat, Manipur, Tamil Nadu and CTU on dated 27.10.2023 and also uploaded the same at ERLDC website at https://erldc.in/open-access/reconciliation-sldc-stu/.The constituents were requested to verify /check the same & comment (if any) to ERLDC at the earliest.

The status of reconciliation is enclosed in **Annexure- VIII.**

**Constituents are requested to update the status of reconciliation.**

**2. For Payments made to STOA Applicants.**

The reconciliation statements of STOA payments for the period of Q2 for FY 23-24 have been sent to the GRIDCO, GMRETL, JBVNL, JITPL , WBSEDCL, APPCPL, DALMIA CEMENT (BHARAT) LIMITED (RCW) , HPX, IEXL, IPCL, NALCO(AP), NALCO(OD), KEIPL, PXIL, ITC Limited Dairy Plant, ITC Limited ITD Munger, ITC Limited Corporate Office Kolkata, TSL-132KV, SHUBHEKSHA ADVISORS PRIVATE LIMITED and TPTCL on dated 27.10.2023 and also uploaded the same at ERLDC website at https://erldc.in/open-access/reconciliation-applicant/.The constituents were requested to verify /check the same & comment (if any) to ERLDC at the earliest.

The status of reconciliation is enclosed in **Annexure-VIII.**

**Constituents are requested to update the status of reconciliation.**

**G. Fees and charges of ERLDC.**

The reconciliation statements of FnC payments by registered users of ERLDC have been sent up to the period of Q2 of FY 2023-24. The same is also available at FnC portal https://fc.posoco.in/FnCWeb/#/landing. Many of the users are yet to sign the reconciliation statement. The constituents were requested to verify /check the same & comment (if any) to ERLDC at the earliest.

The status of reconciliation is enclosed in **Annexure- IX.**

**Constituents are requested to update the status of reconciliation.**

**H. Status of Procurement of New SEM for Eastern Region:**

In 47th ERPC meeting dated 25.11.2022, it was decided to procure new 325 SEM towards replacement of old LnT meters & upcoming projects in Eastern region. TCC advised CTU to go ahead with the procurement of 325 meters. CTU representative submitted that they would authorize PowerGrid to procure the additional 325 nos. of SEMs.

The status of procurement was discussed in 208th OCCM wherein Powergrid representative submitted that procurement of meters is under process whose bid opening date has been extended from 11.10.2023 to 26.10.2023.

**CTU/PGCIL may update the status of procurement of the meters.**

## I. Non receipt of Data of Bihar

The meter data of Amnour (Bsptcl) are not being received by ERLDC since the time of FTC. The meter data of Khagaria (Bihar) is not being received since a year. Although multiple reminder mail has been sent for the same, the problem is still persisting. The non receipt of data is affecting the data validation on a weekly basis.

**Bihar may update the status.**

### J. Frequent time drift in Genus meters

It has been observed that frequent time drift is occurring in Genus make meters. The problem is mostly happening during return of shutdown of any element. Around 10-15 meters are getting drifted on weekly basis for significant amount of time. The situation is creating a more serious concern during time drift of both end meter of a particular line. It is creating huge difficulty in DSM account finalization.

**Members may discuss.**

### K. Faulty cable in newly procured meters

It has been noticed that most of the substations are facing problems in downloading & sending data of newly installed meters. After consultation with the Meter manufacturer, it is found that most of the cases are due to faulty cables. The problems are mainly noticed in various substations of NTPC, Jharkhand & Bihar.

**CTU/PGCIL may update.**

### L. Problem in AMR Data Collection

ERLDC is receiving majority of meter data from remote locations through AMR scheme. AMR scheme is using LAN network and is free from GPRS. In the last few weeks, issues in data collection activities through AMR scheme has occurred which have impacted the weekly metering activities. As informed by TCS, issue has been in LAN/WAN network. The problem is still reoccurring which need to be addressed at the earliest.

**CTU/PGCIL may update.**

**ITEM NO. B.9: Agenda by Powergrid-ER-I.**

**A. Non-Opening of requisite amount of LC:**

(i) Following constituents are required to enhance/ extend LC towards Payment Security Mechanism, as per Annexure-8 of 8.2 of Para 8.0 of BCD Procedure and CERC Regulations:

| Sl No | Name of DIC's | Required Value of LC (in Cr.) | Present Value of LC (in Cr.) |
|---|---|---|---|
| (i) | North Bihar Power Distribution Company Limited (NBPDCL) | **90.98** | **9.73** |
| (ii) | South Bihar Power Distribution Company Limited (SBPDCL) | **106.52** | **15.27** |
| (iii) | Jharkhand Bidyut Vitran Nigam Ltd (JBVNL) | **31.42** | **11.52** |
| (iv) | Sikkim | **3.10** | **--** |

- Letter of Credit (LC) to be opened in favour of **CTUIL for POC & POWERGRID** towards **Non-POC** Billing**.**

**B. Payment of Outstanding dues more than 45 days:**

| Sl No | Name of DIC's | Total Outstanding Dues (in Cr.) | Outstanding Dues more than 45 days (in Cr.) |
|---|---|---|---|
| (i) | Jharkhand Bijli Vitran Nigam Limited (JBVNL) | **161.2** | **39.50** |
| (ii) | South Bihar Power Distribution Company Limited (SBPDCL) | **238.06** | **92.86** |
| (iii) | North Bihar Power Distribution Company Limited (NBPDCL) | **191.36** | **67.02** |
| (iv) | West Bengal State Electricity Transmission Company Ltd. (WBSETCL) | **28.91** | **28.74** |
| (v) | West Bengal State Electricity Distribution Company Ltd. (WBSEDCL) | **376.92** | **9.76** |
| (vi) | Odisha Power Generation Company Limited (OPGCL) | **17.07** | **17.07** |
| | **Total** | **1013.52** | **254.95** |

**C. Non-payment of RTDA bills:**

The following DIC's are not paying RTDA bills:

| Sl No | Name of DIC's | Outstanding dues | Remarks |
|---|---|---|---|
| (i) | West Bengal State Electricity Distribution Company Ltd. (WBSEDCL) | **9.76 Cr.** | Outstanding dues of INR 1.20 Cr. pending for long period, INR 2.91 Cr. (bill dtd. 09.12.2022) & INR 5.65 Cr. (bill dtd. 10.05.2023) against RTDA bills are still pending with WBSEDCL despite of several follow up regarding this. |

**D. Issuance of trial run certificate of 3x80 MVAR Line Reactor of 765kV Gaya-Balia Line at Gaya SS.**

In reference to above, the request for issuance of trial run certificate of following assets was submitted to ERLDC on dated 19.03.2015:

**i)** 765kV Gaya-Balia Line along with 3x80MVAR Line Reactor at Gaya end:

Subsequently, Certificate of Completion of Trial operation was issued by NLDC on dated 31.03.2016. However, in the issued certificate, the asset was mentioned as only '765kV Gaya-Balia line' in place of '765 kV Gaya-Balia Line along with 3x80 MVAR Line Reactor at Gaya'. Trial run certificate of 3x80MVAR Line Reactor is asked by honorable CERC during true-up tariff finalization.

In this regard, issuance of Trial run Certificate of 3 X 80 MVAR Line reactor of 765KV Gaya-Balia Line at Gaya SS is again requested through mail dated 25.07.2022, letter dated 06.09.2022 & letter dated 29.12.2023.

The relevant communications and documents in this regard is enclosed in Annexure.

**E. List of Assets during July'23 to December'23 of Eastern Region (ER)**

| A | *Provision of Spare ICTs in Eastern Region* | DOCO | Remarks | Region |
|---|---|---|---|---|
| 1 | 1 No. 160 MVA,220/132 KV ICT at 400/220/132 kV Daltonganj S/S | 06-07-2023 | DOCO Letter Dtd. 10.07.2023 | ER-I |

| B | *Provision of Spare ICTs in Eastern Region* | DOCO | Remarks | Region |
|---|---|---|---|---|
| 1 | 1 No. 500 MVA, 400/220 KV ICT at 400/220 kV Pusauli S/S | 03-08-2023 | DOCO Letter Dtd. 03.08.2023 | ER-I |
| **C** | ***Establishment of Communication System under Expansion/ Upgradation of SCADA/ EMS System at SLDCs of ER (BSPTCL and DVC) links*** | **DOCO** | **Remarks** | **Region** |
| 1 | MTPS-Gopalganj (100.35 kM) | 01-02-2021 | DOCO Letter Dtd. 07.08.2023 | ER-I |
| 2 | Siwan-Gopalganj (30.12 kM) | 07-07-2020 | | |
| 3 | Saharsa- Purnea (BH) (101.11 kM) | 01-06-2019 | | |
| 4 | Kahalgaon (BH)- Kahalgaon (NTPC) (5.71 kM) | 10-09-2022 | | |
| 5 | Hathidah- Lakhisarai (BH) (28.98 kM) | 14-05-2022 | | |
| **D** | ***Fibre Optic Communication System in Eastern Region under expansion of wideband communication system in Eastern Region*** | **DOCO** | **Remarks** | **Region** |
| 1 | Biharshariff-Banka (OPGW cable 24 F), Length= 183.872 kM | 27-06-2023 | DOCO Letter Dtd. 22.08.2023 | ER-II |
| **E** | ***POWERGRID works associated with Transmission System Strengthening in Indian System for transfer of power from new HEPs in Bhutan*** | **DOCO** | **Remarks** | **Region** |
| 1 | 02 numbers 400 kV line bays at Alipurduar S/S for termination of Alipurduar-Siliguri (New) 400 kV D/C (Quad) line (line under TBCB) | 01-08-2019 | DOCO Letter Dtd. 04.09.2023 | ER-II |
| 2 | 02 numbers 400 kV line bays at Siliguri S/S for termination of Alipurduar-Siliguri (New) 400 kV D/C (Quad) line (line under TBCB) | | | |
| **F** | ***Project-ERSS-XVII-B*** | **DOCO** | **Remarks** | **Region** |

| | | | | |
|---|---|---|---|---|
| 1 | Corrigendum:-Reconductoring of Maithon RB-Maithon 400 kV D/C line along with modifications/additions in bay equipment at both ends of the line viz. Maithon 400/220 kV S/S of POWERGRID and generation switchyard of Maithon RB. | 08-08-2023 | DOCO Letter Dtd. 09.10.2023 | ER-II |
| **G** | ***Establishment of Reliable Communication Scheme Under Central sector for Eastern Region.*** | **DOCO** | **Remarks** | **Region** |
| 1 | Alipurduar-Salakati (OPGW Cable 24 F), 109.264 KM in Length | 23-02-2022 | DOCO Letter Dtd. 04.09.2023 | ER-II |
| **H** | ***Provision of Spare ICTs in Eastern Region*** | **DOCO** | **Remarks** | **Region** |
| 1 | 1 No. 500 MVA, 400/220 KV, 3-Ph ICT at 400/220 KV Pandiabili S/S (Regional SPARE ICT for Odisha) | 05-09-2023 | DOCO Letter Dtd. 05.09.2023 | Odisha Proj. |
| **I** | ***Communication System Package for Strengthening of OPGW Network in ER associated with project upgradation of SCADA /RTUs/SAS in central sector stations and strengthening of OPGW network in ER*** | **DOCO** | **Remarks** | **Region** |
| 1 | 400 kV Talcher-Rourkela OPGW link along with associated equipments i.e 2 Nos SDH equipment with 4 nos of OLIC (225 KM Range) and 2 nos 48V DC power supply (450 Ah Battery Bank & 35A DCPS) at Rourkela (POWERGRID) and Talcher (NTPC) S/S-170.963 kM | 21-09-2023 | DOCO Letter Dtd. 10.11.2023 | Odisha Proj. |

**********

# Annexure B.1

| Report Name | Raghu_26092023-26-Sep-202 | Interval | 15 Minutes |
|---|---|---|---|
| From Date | 04-09-2023 00:00 | Data Source | OpenHRS |
| To Date | 10-09-2023 23:59 | | |
| Generate Date | 26-09-2023 00:00 | | |

| Date | AGHU_DV - 400_Main_Bus2_Voltage (AVERAGE) | RAGHU_DV - 400_RANCH_PG_2_P (AVERAGE) | RAGHU_DV - 400_RANCH_PG_2_Q (AVERAGE) | AGHU_DV - 400_RANCH_PG_3_P (AVERAG | RAGHU_DV - 400_RANCH_PG_3_Q (AVERAGE) |
|---|---|---|---|---|---|
| 04-09-2023 00:00:00 | 406.0 | 182.3 | -34.5 | 180.5 | -36.9 |
| 04-09-2023 00:15:00 | 405.1 | 192.6 | -34.7 | 190.6 | -37.3 |
| 04-09-2023 00:30:00 | 405.4 | 200.2 | -36.7 | 198.0 | -39.3 |
| 04-09-2023 00:45:00 | 405.6 | 203.4 | -38.0 | 201.4 | -40.6 |
| 04-09-2023 01:00:00 | 406.0 | 201.8 | -39.3 | 199.8 | -41.8 |
| 04-09-2023 01:15:00 | 406.0 | 205.0 | -40.7 | 203.0 | -43.3 |
| 04-09-2023 01:30:00 | 406.5 | 205.3 | -42.6 | 202.8 | -45.4 |
| 04-09-2023 01:45:00 | 406.8 | 201.6 | -44.3 | 199.3 | -47.0 |
| 04-09-2023 02:00:00 | 407.1 | 203.3 | -46.0 | 201.1 | -48.8 |
| 04-09-2023 02:15:00 | 407.1 | 209.5 | -45.6 | 207.4 | -48.3 |
| 04-09-2023 02:30:00 | 407.0 | 213.3 | -46.0 | 211.0 | -48.9 |
| 04-09-2023 02:45:00 | 407.0 | 209.9 | -47.7 | 207.7 | -50.4 |
| 04-09-2023 03:00:00 | 407.4 | 207.1 | -48.7 | 204.8 | -51.3 |
| 04-09-2023 03:15:00 | 407.7 | 204.2 | -51.0 | 202.0 | -53.6 |
| 04-09-2023 03:30:00 | 408.0 | 202.2 | -52.4 | 200.1 | -54.9 |
| 04-09-2023 03:45:00 | 408.0 | 203.7 | -52.7 | 201.5 | -55.3 |
| 04-09-2023 04:00:00 | 408.1 | 203.7 | -52.9 | 201.3 | -55.4 |
| 04-09-2023 04:15:00 | 408.5 | 204.9 | -53.3 | 202.7 | -56.0 |
| 04-09-2023 04:30:00 | 408.3 | 206.9 | -53.2 | 204.3 | -55.8 |
| 04-09-2023 04:45:00 | 408.5 | 209.0 | -53.3 | 204.3 | -56.9 |
| 04-09-2023 05:00:00 | 408.2 | 212.7 | -53.6 | 202.6 | -59.8 |
| 04-09-2023 05:15:00 | 408.7 | 220.2 | -54.5 | 209.4 | -61.0 |
| 04-09-2023 05:30:00 | 409.0 | 235.8 | -55.7 | 224.0 | -62.7 |
| 04-09-2023 05:45:00 | 408.2 | 257.0 | -54.7 | 244.2 | -62.7 |
| 04-09-2023 06:00:00 | 408.2 | 268.8 | -52.4 | 256.1 | -60.6 |
| 04-09-2023 06:15:00 | 408.3 | 278.4 | -52.0 | 265.0 | -60.8 |
| 04-09-2023 06:30:00 | 407.8 | 283.5 | -48.2 | 268.1 | -58.4 |
| 04-09-2023 06:45:00 | 408.0 | 283.5 | -46.7 | 268.2 | -57.1 |
| 04-09-2023 07:00:00 | 408.0 | 284.8 | -46.2 | 269.5 | -56.8 |
| 04-09-2023 07:15:00 | 408.2 | 274.3 | -48.5 | 266.6 | -54.9 |
| 04-09-2023 07:30:00 | 408.0 | 268.7 | -48.3 | 261.6 | -54.4 |
| 04-09-2023 07:45:00 | 408.0 | 262.5 | -49.3 | 256.6 | -54.6 |
| 04-09-2023 08:00:00 | 408.0 | 258.1 | -49.3 | 247.5 | -56.8 |
| 04-09-2023 08:15:00 | 407.6 | 256.3 | -49.9 | 242.2 | -59.1 |
| 04-09-2023 08:30:00 | 407.2 | 257.9 | -50.9 | 244.1 | -59.7 |
| 04-09-2023 08:45:00 | 407.4 | 256.0 | -51.1 | 242.0 | -60.2 |
| 04-09-2023 09:00:00 | 407.4 | 249.5 | -50.8 | 238.7 | -58.1 |
| 04-09-2023 09:15:00 | 407.4 | 244.9 | -49.6 | 242.8 | -52.4 |
| 04-09-2023 09:30:00 | 407.1 | 245.2 | -48.4 | 243.2 | -51.3 |
| 04-09-2023 09:45:00 | 407.0 | 236.9 | -47.6 | 235.0 | -50.3 |
| 04-09-2023 10:00:00 | 407.0 | 221.8 | -47.6 | 218.4 | -50.7 |
| 04-09-2023 10:15:00 | 407.1 | 206.3 | -49.3 | 202.4 | -52.7 |
| 04-09-2023 10:30:00 | 407.3 | 201.6 | -48.7 | 197.3 | -52.1 |
| 04-09-2023 10:45:00 | 407.0 | 191.1 | -47.4 | 185.4 | -51.4 |
| 04-09-2023 11:00:00 | 407.0 | 186.9 | -45.6 | 181.5 | -49.4 |
| 04-09-2023 11:15:00 | 407.0 | 188.3 | -45.8 | 182.3 | -49.9 |
| 04-09-2023 11:30:00 | 407.0 | 187.9 | -43.8 | 179.1 | -49.2 |
| 04-09-2023 11:45:00 | 406.3 | 212.2 | -46.5 | 199.0 | -54.3 |
| 04-09-2023 12:00:00 | 406.0 | 215.0 | -41.9 | 204.5 | -49.0 |
| 04-09-2023 12:15:00 | 405.6 | 223.5 | -40.2 | 211.5 | -48.0 |
| 04-09-2023 12:30:00 | 405.5 | 234.5 | -38.6 | 222.3 | -47.0 |
| 04-09-2023 12:45:00 | 405.3 | 235.1 | -38.9 | 222.9 | -47.3 |
| 04-09-2023 13:00:00 | 404.9 | 238.3 | -37.6 | 225.7 | -46.4 |
| 04-09-2023 13:15:00 | 405.5 | 245.8 | -41.6 | 232.6 | -50.4 |
| 04-09-2023 13:30:00 | 405.7 | 253.9 | -43.1 | 240.3 | -52.3 |
| 04-09-2023 13:45:00 | 405.1 | 260.4 | -42.1 | 246.2 | -51.8 |
| 04-09-2023 14:00:00 | 405.6 | 267.3 | -44.6 | 252.3 | -54.8 |
| 04-09-2023 14:15:00 | 405.5 | 271.5 | -44.1 | 256.6 | -54.3 |
| 04-09-2023 14:30:00 | 405.0 | 267.8 | -40.6 | 253.0 | -50.9 |
| 04-09-2023 14:45:00 | 404.9 | 268.6 | -41.2 | 253.5 | -51.6 |
| 04-09-2023 15:00:00 | 405.0 | 271.2 | -42.1 | 256.4 | -52.3 |
| 04-09-2023 15:15:00 | 405.1 | 276.9 | -45.8 | 261.5 | -56.2 |
| 04-09-2023 15:30:00 | 405.2 | 276.6 | -46.8 | 261.8 | -56.7 |
| 04-09-2023 15:45:00 | 405.0 | 278.4 | -49.2 | 262.9 | -59.2 |
| 04-09-2023 16:00:00 | 405.0 | 274.0 | -48.6 | 258.6 | -58.5 |
| 04-09-2023 16:15:00 | 405.8 | 264.5 | -49.1 | 249.6 | -58.9 |
| 04-09-2023 16:30:00 | 405.8 | 270.3 | -48.0 | 254.6 | -58.3 |
| 04-09-2023 16:45:00 | 405.2 | 281.0 | -48.6 | 265.4 | -59.1 |
| 04-09-2023 17:00:00 | 405.1 | 287.8 | -49.2 | 274.9 | -58.2 |
| 04-09-2023 17:15:00 | 405.8 | 275.6 | -52.5 | 274.2 | -55.6 |
| 04-09-2023 17:30:00 | 406.0 | 276.2 | -50.5 | 274.8 | -53.4 |
| 04-09-2023 17:45:00 | 405.3 | 273.1 | -49.4 | 271.9 | -52.2 |
| 04-09-2023 18:00:00 | 405.6 | 258.4 | -48.3 | 257.0 | -51.0 |
| 04-09-2023 18:15:00 | 405.4 | 242.5 | -49.3 | 241.2 | -51.7 |
| 04-09-2023 18:30:00 | 405.0 | 247.8 | -47.0 | 246.8 | -49.7 |
| 04-09-2023 18:45:00 | 405.0 | 251.4 | -45.9 | 250.3 | -48.5 |
| 04-09-2023 19:00:00 | 404.8 | 249.7 | -44.9 | 248.5 | -47.5 |
| 04-09-2023 19:15:00 | 404.7 | 241.0 | -43.6 | 240.0 | -46.3 |
| 04-09-2023 19:30:00 | 405.0 | 235.3 | -41.9 | 234.2 | -44.4 |
| 04-09-2023 19:45:00 | 405.0 | 223.7 | -41.1 | 222.8 | -43.6 |
| 04-09-2023 20:00:00 | 405.2 | 198.0 | -41.4 | 196.4 | -43.8 |
| 04-09-2023 20:15:00 | 405.3 | 203.6 | -43.4 | 202.6 | -45.7 |
| 04-09-2023 20:30:00 | 405.0 | 204.8 | -42.5 | 203.7 | -44.8 |
| 04-09-2023 20:45:00 | 405.3 | 200.1 | -41.4 | 198.7 | -43.7 |
| 04-09-2023 21:00:00 | 405.1 | 194.9 | -39.6 | 193.6 | -41.8 |
| 04-09-2023 21:15:00 | 405.0 | 190.1 | -39.6 | 188.7 | -41.8 |
| 04-09-2023 21:30:00 | 405.0 | 192.1 | -40.8 | 190.8 | -43.0 |
| 04-09-2023 21:45:00 | 405.0 | 197.3 | -41.5 | 195.8 | -43.8 |
| 04-09-2023 22:00:00 | 405.4 | 200.3 | -41.7 | 198.9 | -44.1 |
| 04-09-2023 22:15:00 | 405.9 | 196.0 | -41.2 | 194.5 | -43.5 |
| 04-09-2023 22:30:00 | 405.3 | 194.0 | -40.1 | 192.7 | -42.3 |
| 04-09-2023 22:45:00 | 405.2 | 193.8 | -40.9 | 192.5 | -43.2 |
| 04-09-2023 23:00:00 | 405.0 | 193.5 | -39.5 | 192.0 | -41.9 |
| 04-09-2023 23:15:00 | 405.0 | 196.8 | -38.5 | 195.5 | -40.8 |
| 04-09-2023 23:30:00 | 405.0 | 195.6 | -38.9 | 194.2 | -41.3 |
| 04-09-2023 23:45:00 | 405.0 | 199.4 | -40.0 | 198.1 | -42.3 |
| 05-09-2023 00:00:00 | 405.0 | 198.2 | -40.5 | 196.7 | -42.9 |
| 05-09-2023 00:15:00 | 405.0 | 192.3 | -40.0 | 190.9 | -42.3 |
| 05-09-2023 00:30:00 | 405.0 | 194.8 | -40.6 | 193.4 | -43.0 |
| 05-09-2023 00:45:00 | 405.0 | 197.4 | -40.6 | 195.8 | -43.1 |
| 05-09-2023 01:00:00 | 405.0 | 198.8 | -42.1 | 197.4 | -44.5 |
| 05-09-2023 01:15:00 | 406.0 | 197.0 | -43.1 | 195.6 | -45.5 |
| 05-09-2023 01:30:00 | 406.0 | 192.1 | -42.4 | 190.6 | -44.8 |
| 05-09-2023 01:45:00 | 406.0 | 194.8 | -43.1 | 193.3 | -45.4 |
| 05-09-2023 02:00:00 | 406.0 | 197.4 | -44.0 | 195.9 | -46.4 |
| 05-09-2023 02:15:00 | 406.0 | 195.9 | -44.7 | 194.4 | -47.0 |
| 05-09-2023 02:30:00 | 406.0 | 200.0 | -45.8 | 198.5 | -48.2 |
| 05-09-2023 02:45:00 | 406.0 | 203.7 | -45.9 | 202.1 | -48.5 |
| 05-09-2023 03:00:00 | 406.0 | 207.9 | -47.4 | 206.4 | -49.9 |
| 05-09-2023 03:15:00 | 406.0 | 211.7 | -48.6 | 210.0 | -51.1 |
| 05-09-2023 03:30:00 | 406.0 | 210.1 | -48.6 | 208.6 | -51.0 |
| 05-09-2023 03:45:00 | 406.8 | 209.0 | -49.7 | 207.4 | -52.1 |
| 05-09-2023 04:00:00 | 407.0 | 210.9 | -51.5 | 209.2 | -53.9 |
| 05-09-2023 04:15:00 | 407.0 | 211.1 | -53.3 | 209.5 | -55.8 |
| 05-09-2023 04:30:00 | 407.0 | 217.3 | -53.4 | 215.7 | -55.9 |
| 05-09-2023 04:45:00 | 407.0 | 219.8 | -53.8 | 218.1 | -56.4 |
| 05-09-2023 05:00:00 | 406.7 | 221.1 | -52.0 | 219.5 | -54.5 |
| 05-09-2023 05:15:00 | 407.0 | 234.1 | -52.9 | 232.4 | -55.6 |
| 05-09-2023 05:30:00 | 406.8 | 238.3 | -52.1 | 236.6 | -55.0 |
| 05-09-2023 05:45:00 | 406.8 | 249.5 | -50.4 | 247.8 | -53.2 |
| 05-09-2023 06:00:00 | 407.0 | 258.5 | -50.4 | 256.9 | -53.4 |
| 05-09-2023 06:15:00 | 407.0 | 259.4 | -50.2 | 257.8 | -53.1 |
| 05-09-2023 06:30:00 | 406.4 | 264.9 | -47.1 | 263.2 | -50.2 |
| 05-09-2023 06:45:00 | 406.0 | 271.0 | -45.7 | 269.3 | -48.8 |
| 05-09-2023 07:00:00 | 405.9 | 277.8 | -44.4 | 276.0 | -47.5 |
| 05-09-2023 07:15:00 | 406.0 | 282.5 | -43.0 | 281.0 | -46.2 |
| 05-09-2023 07:30:00 | 406.0 | 286.4 | -43.7 | 284.5 | -46.9 |
| 05-09-2023 07:45:00 | 406.0 | 283.1 | -45.1 | 281.4 | -48.1 |
| 05-09-2023 08:00:00 | 406.0 | 275.7 | -46.5 | 273.8 | -49.6 |
| 05-09-2023 08:15:00 | 406.0 | 275.7 | -45.8 | 273.9 | -48.8 |
| 05-09-2023 08:30:00 | 406.0 | 276.8 | -44.1 | 275.0 | -47.2 |
| 05-09-2023 08:45:00 | 405.9 | 268.7 | -42.4 | 267.0 | -45.4 |
| 05-09-2023 09:00:00 | 405.8 | 265.9 | -43.4 | 264.1 | -46.3 |
| 05-09-2023 09:15:00 | 405.7 | 268.7 | -41.4 | 267.2 | -44.4 |
| 05-09-2023 09:30:00 | 406.0 | 272.2 | -43.0 | 270.3 | -46.1 |
| 05-09-2023 09:45:00 | 405.7 | 273.4 | -44.0 | 271.4 | -47.2 |
| 05-09-2023 10:00:00 | 405.5 | 268.4 | -44.7 | 266.5 | -47.6 |
| 05-09-2023 10:15:00 | 405.0 | 282.7 | -47.7 | 281.0 | -51.0 |
| 05-09-2023 10:30:00 | 405.0 | 286.1 | -48.2 | 283.9 | -51.3 |
| 05-09-2023 10:45:00 | 405.0 | 286.3 | -47.7 | 284.0 | -51.0 |
| 05-09-2023 11:00:00 | 405.0 | 281.4 | -46.6 | 279.7 | -49.7 |
| 05-09-2023 11:15:00 | 405.0 | 274.5 | -44.9 | 273.0 | -47.8 |
| 05-09-2023 11:30:00 | 405.0 | 279.4 | -44.1 | 277.9 | -46.9 |
| 05-09-2023 11:45:00 | 404.9 | 283.1 | -43.4 | 281.9 | -46.3 |
| 05-09-2023 12:00:00 | 404.9 | 276.8 | -43.7 | 275.4 | -46.5 |
| 05-09-2023 12:15:00 | 405.0 | 270.8 | -43.3 | 269.5 | -46.3 |
| 05-09-2023 12:30:00 | 405.0 | 263.2 | -42.9 | 261.9 | -45.8 |
| 05-09-2023 12:45:00 | 405.0 | 252.2 | -43.0 | 251.0 | -45.6 |
| 05-09-2023 13:00:00 | 405.2 | 240.7 | -42.1 | 239.4 | -44.7 |
| 05-09-2023 13:15:00 | 406.0 | 238.6 | -46.5 | 237.6 | -49.0 |
| 05-09-2023 13:30:00 | 406.0 | 241.1 | -47.8 | 239.8 | -50.5 |
| 05-09-2023 13:45:00 | 406.0 | 251.7 | -49.6 | 250.3 | -52.3 |
| 05-09-2023 14:00:00 | 405.9 | 258.1 | -50.6 | 256.8 | -53.4 |
| 05-09-2023 14:15:00 | 406.0 | 258.1 | -50.4 | 256.6 | -53.3 |
| 05-09-2023 14:30:00 | 406.0 | 263.9 | -47.9 | 262.3 | -50.8 |
| 05-09-2023 14:45:00 | 405.8 | 258.4 | -46.1 | 257.0 | -48.8 |
| 05-09-2023 15:00:00 | 405.9 | 255.0 | -46.0 | 253.7 | -48.7 |
| 05-09-2023 15:15:00 | 405.4 | 253.0 | -45.7 | 252.0 | -48.4 |
| 05-09-2023 15:30:00 | 405.4 | 258.9 | -44.9 | 257.5 | -47.6 |
| 05-09-2023 15:45:00 | 405.3 | 259.1 | -44.4 | 257.8 | -47.2 |
| 05-09-2023 16:00:00 | 405.0 | 260.9 | -44.3 | 259.7 | -47.0 |
| 05-09-2023 16:15:00 | 405.2 | 257.7 | -45.1 | 256.5 | -47.9 |
| 05-09-2023 16:30:00 | 405.0 | 267.7 | -41.4 | 266.6 | -44.2 |
| 05-09-2023 16:45:00 | 405.0 | 273.4 | -41.1 | 272.1 | -44.0 |
| 05-09-2023 17:00:00 | 405.2 | 275.2 | -42.3 | 273.3 | -45.2 |
| 05-09-2023 17:15:00 | 405.3 | 282.7 | -45.1 | 279.8 | -48.6 |
| 05-09-2023 17:30:00 | 405.0 | 274.2 | -42.5 | 271.7 | -45.9 |
| 05-09-2023 17:45:00 | 405.0 | 279.8 | -40.2 | 277.7 | -43.3 |
| 05-09-2023 18:00:00 | 405.2 | 266.4 | -40.4 | 264.5 | -43.4 |
| 05-09-2023 18:15:00 | 406.0 | 232.3 | -41.9 | 230.6 | -44.5 |
| 05-09-2023 18:30:00 | 405.1 | 222.2 | -39.2 | 220.2 | -41.9 |
| 05-09-2023 18:45:00 | 405.0 | 217.8 | -39.6 | 216.3 | -42.1 |
| 05-09-2023 19:00:00 | 405.0 | 222.3 | -38.4 | 220.9 | -41.0 |

| | | | | | |
|---|---|---|---|---|---|
| 05-09-2023 19:15:00 | 405.1 | 219.9 | -38.4 | 218.7 | -41.0 |
| 05-09-2023 19:30:00 | 404.7 | 214.2 | -35.3 | 213.0 | -37.7 |
| 05-09-2023 19:45:00 | 404.3 | 207.7 | -34.9 | 206.5 | -37.2 |
| 05-09-2023 20:00:00 | 405.0 | 203.9 | -35.1 | 202.7 | -37.4 |
| 05-09-2023 20:15:00 | 404.9 | 209.1 | -35.8 | 207.9 | -38.1 |
| 05-09-2023 20:30:00 | 405.0 | 214.9 | -35.6 | 213.1 | -38.2 |
| 05-09-2023 20:45:00 | 405.0 | 211.8 | -34.4 | 210.3 | -36.9 |
| 05-09-2023 21:00:00 | 405.0 | 204.8 | -33.6 | 203.6 | -35.9 |
| 05-09-2023 21:15:00 | 405.0 | 207.2 | -36.5 | 205.9 | -38.9 |
| 05-09-2023 21:30:00 | 405.0 | 205.7 | -35.3 | 204.1 | -37.7 |
| 05-09-2023 21:45:00 | 405.0 | 200.4 | -34.3 | 199.1 | -36.5 |
| 05-09-2023 22:00:00 | 405.9 | 198.5 | -36.2 | 197.2 | -38.4 |
| 05-09-2023 22:15:00 | 405.0 | 193.3 | -32.7 | 191.7 | -35.1 |
| 05-09-2023 22:30:00 | 405.0 | 194.0 | -32.5 | 192.3 | -35.1 |
| 05-09-2023 22:45:00 | 405.0 | 193.5 | -33.4 | 191.8 | -35.9 |
| 05-09-2023 23:00:00 | 405.0 | 193.4 | -34.1 | 192.0 | -36.5 |
| 05-09-2023 23:15:00 | 405.0 | 186.3 | -30.1 | 184.9 | -32.4 |
| 05-09-2023 23:30:00 | 405.0 | 187.0 | -29.6 | 185.4 | -31.9 |
| 05-09-2023 23:45:00 | 405.0 | 192.6 | -31.4 | 190.1 | -34.0 |
| 06-09-2023 00:00:00 | 405.0 | 187.3 | -31.4 | 185.4 | -33.9 |
| 06-09-2023 00:15:00 | 405.0 | 188.7 | -30.2 | 187.1 | -32.7 |
| 06-09-2023 00:30:00 | 405.0 | 189.9 | -33.2 | 188.6 | -35.6 |
| 06-09-2023 00:45:00 | 405.2 | 194.6 | -34.5 | 193.0 | -36.9 |
| 06-09-2023 01:00:00 | 405.0 | 196.6 | -36.5 | 195.1 | -38.8 |
| 06-09-2023 01:15:00 | 405.5 | 200.7 | -39.5 | 199.4 | -41.9 |
| 06-09-2023 01:30:00 | 405.9 | 206.4 | -39.7 | 205.0 | -42.1 |
| 06-09-2023 01:45:00 | 405.9 | 213.1 | -40.6 | 211.6 | -43.1 |
| 06-09-2023 02:00:00 | 406.0 | 214.5 | -41.8 | 213.0 | -44.2 |
| 06-09-2023 02:15:00 | 406.0 | 213.8 | -42.4 | 212.4 | -44.9 |
| 06-09-2023 02:30:00 | 406.0 | 217.4 | -42.4 | 216.3 | -45.1 |
| 06-09-2023 02:45:00 | 406.0 | 217.5 | -43.0 | 216.1 | -45.4 |
| 06-09-2023 03:00:00 | 406.0 | 217.8 | -44.7 | 216.3 | -47.2 |
| 06-09-2023 03:15:00 | 406.0 | 219.8 | -46.7 | 218.3 | -49.1 |
| 06-09-2023 03:30:00 | 406.0 | 215.9 | -46.1 | 214.5 | -48.7 |
| 06-09-2023 03:45:00 | 406.6 | 219.8 | -47.7 | 218.4 | -50.2 |
| 06-09-2023 04:00:00 | 407.0 | 228.6 | -49.1 | 227.1 | -51.8 |
| 06-09-2023 04:15:00 | 407.0 | 232.1 | -49.7 | 230.4 | -52.4 |
| 06-09-2023 04:30:00 | 407.0 | 235.9 | -51.3 | 234.4 | -54.1 |
| 06-09-2023 04:45:00 | 407.0 | 236.1 | -50.7 | 234.6 | -53.5 |
| 06-09-2023 05:00:00 | 407.0 | 237.8 | -51.8 | 236.1 | -54.5 |
| 06-09-2023 05:15:00 | 407.0 | 242.4 | -53.1 | 240.2 | -55.9 |
| 06-09-2023 05:30:00 | 407.0 | 253.8 | -50.8 | 251.4 | -54.1 |
| 06-09-2023 05:45:00 | 406.8 | 267.5 | -48.4 | 264.9 | -51.8 |
| 06-09-2023 06:00:00 | 406.7 | 272.3 | -47.6 | 269.4 | -51.2 |
| 06-09-2023 06:15:00 | 406.5 | 278.6 | -47.0 | 276.1 | -50.3 |
| 06-09-2023 06:30:00 | 406.0 | 279.4 | -44.8 | 277.2 | -48.1 |
| 06-09-2023 06:45:00 | 406.3 | 280.4 | -44.1 | 278.4 | -47.3 |
| 06-09-2023 07:00:00 | 406.0 | 280.5 | -43.2 | 278.8 | -46.3 |
| 06-09-2023 07:15:00 | 406.0 | 282.4 | -43.0 | 280.7 | -46.2 |
| 06-09-2023 07:30:00 | 406.0 | 278.0 | -43.0 | 276.2 | -46.1 |
| 06-09-2023 07:45:00 | 406.0 | 275.0 | -42.6 | 273.2 | -45.7 |
| 06-09-2023 08:00:00 | 406.0 | 274.7 | -44.7 | 272.8 | -47.9 |
| 06-09-2023 08:15:00 | 406.0 | 282.7 | -42.1 | 280.5 | -45.4 |
| 06-09-2023 08:30:00 | 406.0 | 278.5 | -39.0 | 275.8 | -42.6 |
| 06-09-2023 08:45:00 | 405.3 | 267.6 | -36.8 | 265.6 | -40.0 |
| 06-09-2023 09:00:00 | 405.7 | 265.8 | -37.9 | 263.7 | -40.9 |
| 06-09-2023 09:15:00 | 405.8 | 260.3 | -38.2 | 258.4 | -41.3 |
| 06-09-2023 09:30:00 | 406.0 | 254.4 | -37.7 | 252.6 | -40.6 |
| 06-09-2023 09:45:00 | 405.5 | 255.3 | -36.5 | 253.3 | -39.5 |
| 06-09-2023 10:00:00 | 405.5 | 248.6 | -37.0 | 246.9 | -39.8 |
| 06-09-2023 10:15:00 | 405.2 | 248.9 | -36.2 | 247.4 | -39.0 |
| 06-09-2023 10:30:00 | 405.2 | 246.0 | -35.3 | 244.2 | -38.3 |
| 06-09-2023 10:45:00 | 405.7 | 238.2 | -35.1 | 236.5 | -37.8 |
| 06-09-2023 11:00:00 | 405.0 | 233.1 | -33.9 | 230.9 | -36.9 |
| 06-09-2023 11:15:00 | 405.0 | 232.0 | -33.6 | 221.0 | -41.6 |
| 06-09-2023 11:30:00 | 405.1 | 230.8 | -34.2 | 217.2 | -43.7 |
| 06-09-2023 11:45:00 | 405.0 | 222.1 | -33.6 | 207.7 | -43.3 |
| 06-09-2023 12:00:00 | 405.0 | 228.1 | -34.4 | 219.3 | -41.0 |
| 06-09-2023 12:15:00 | 405.2 | 224.8 | -35.5 | 223.0 | -38.3 |
| 06-09-2023 12:30:00 | 405.0 | 224.3 | -35.4 | 222.8 | -38.1 |
| 06-09-2023 12:45:00 | 405.0 | 216.1 | -33.7 | 214.3 | -36.3 |
| 06-09-2023 13:00:00 | 405.0 | 218.6 | -35.2 | 216.9 | -37.8 |
| 06-09-2023 13:15:00 | 405.9 | 213.1 | -42.1 | 211.5 | -44.7 |
| 06-09-2023 13:30:00 | 406.0 | 209.9 | -41.7 | 208.0 | -44.3 |
| 06-09-2023 13:45:00 | 406.0 | 212.1 | -42.3 | 208.6 | -45.6 |
| 06-09-2023 14:00:00 | 405.8 | 219.2 | -43.0 | 217.1 | -45.5 |
| 06-09-2023 14:15:00 | 406.0 | 222.2 | -41.9 | 220.0 | -44.7 |
| 06-09-2023 14:30:00 | 406.0 | 221.9 | -40.7 | 219.7 | -43.4 |
| 06-09-2023 14:45:00 | 405.2 | 221.2 | -38.7 | 219.1 | -41.4 |
| 06-09-2023 15:00:00 | 405.5 | 225.5 | -40.4 | 222.8 | -43.5 |
| 06-09-2023 15:15:00 | 405.8 | 221.0 | -40.1 | 219.3 | -42.7 |
| 06-09-2023 15:30:00 | 405.0 | 222.3 | -38.5 | 220.3 | -41.2 |
| 06-09-2023 15:45:00 | 405.4 | 222.7 | -38.7 | 221.0 | -41.4 |
| 06-09-2023 16:00:00 | 405.0 | 227.9 | -39.4 | 226.3 | -42.1 |
| 06-09-2023 16:15:00 | 405.2 | 232.1 | -42.0 | 229.9 | -44.8 |
| 06-09-2023 16:30:00 | 405.9 | 236.9 | -43.1 | 235.0 | -45.8 |
| 06-09-2023 16:45:00 | 406.0 | 230.8 | -44.1 | 229.3 | -46.8 |
| 06-09-2023 17:00:00 | 406.0 | 231.5 | -43.5 | 229.6 | -46.2 |
| 06-09-2023 17:15:00 | 405.7 | 246.1 | -45.5 | 244.3 | -48.6 |
| 06-09-2023 17:30:00 | 405.3 | 253.8 | -43.4 | 252.0 | -46.3 |
| 06-09-2023 17:45:00 | 405.9 | 253.7 | -43.7 | 251.9 | -46.6 |
| 06-09-2023 18:00:00 | 405.5 | 250.2 | -44.1 | 248.7 | -47.0 |
| 06-09-2023 18:15:00 | 406.1 | 236.4 | -44.6 | 234.6 | -47.2 |
| 06-09-2023 18:30:00 | 404.9 | 224.5 | -40.5 | 222.9 | -43.1 |
| 06-09-2023 18:45:00 | 404.8 | 219.9 | -38.6 | 217.0 | -42.0 |
| 06-09-2023 19:00:00 | 404.6 | 222.5 | -40.4 | 216.8 | -45.1 |
| 06-09-2023 19:15:00 | 404.8 | 217.3 | -40.3 | 215.2 | -42.8 |
| 06-09-2023 19:30:00 | 404.9 | 206.4 | -40.4 | 204.6 | -42.9 |
| 06-09-2023 19:45:00 | 405.0 | 203.6 | -41.5 | 201.6 | -44.0 |
| 06-09-2023 20:00:00 | 405.0 | 204.7 | -41.6 | 202.7 | -44.1 |
| 06-09-2023 20:15:00 | 405.0 | 202.8 | -42.3 | 200.7 | -44.6 |
| 06-09-2023 20:30:00 | 405.0 | 197.9 | -41.1 | 196.0 | -43.6 |
| 06-09-2023 20:45:00 | 405.0 | 191.9 | -40.2 | 186.0 | -44.4 |
| 06-09-2023 21:00:00 | 404.6 | 191.5 | -39.1 | 187.4 | -42.3 |
| 06-09-2023 21:15:00 | 405.0 | 198.2 | -40.5 | 191.4 | -45.2 |
| 06-09-2023 21:30:00 | 405.0 | 198.6 | -40.2 | 196.0 | -43.1 |
| 06-09-2023 21:45:00 | 405.0 | 204.1 | -40.7 | 199.6 | -44.5 |
| 06-09-2023 22:00:00 | 405.0 | 195.6 | -41.0 | 188.9 | -47.9 |
| 06-09-2023 22:15:00 | 405.8 | 195.1 | -42.8 | 193.2 | -47.1 |
| 06-09-2023 22:30:00 | 405.3 | 189.4 | -41.2 | 187.5 | -43.8 |
| 06-09-2023 22:45:00 | 405.0 | 187.8 | -40.3 | 185.8 | -42.7 |
| 06-09-2023 23:00:00 | 405.0 | 186.8 | -38.5 | 185.2 | -40.9 |
| 06-09-2023 23:15:00 | 405.0 | 176.5 | -35.0 | 174.7 | -37.2 |
| 06-09-2023 23:30:00 | 405.0 | 176.2 | -36.2 | 174.9 | -38.4 |
| 06-09-2023 23:45:00 | 405.0 | 179.3 | -36.8 | 177.9 | -38.9 |
| 07-09-2023 00:00:00 | 405.4 | 182.0 | -36.4 | 180.8 | -38.6 |
| 07-09-2023 00:15:00 | 405.0 | 187.2 | -37.5 | 186.0 | -39.6 |
| 07-09-2023 00:30:00 | 405.0 | 190.1 | -37.7 | 188.9 | -40.0 |
| 07-09-2023 00:45:00 | 405.6 | 191.8 | -37.9 | 190.6 | -40.1 |
| 07-09-2023 01:00:00 | 405.9 | 194.0 | -38.3 | 192.8 | -40.6 |
| 07-09-2023 01:15:00 | 406.0 | 198.4 | -40.7 | 197.2 | -43.1 |
| 07-09-2023 01:30:00 | 406.0 | 198.2 | -42.1 | 195.9 | -44.9 |
| 07-09-2023 01:45:00 | 406.0 | 203.6 | -43.1 | 198.6 | -46.9 |
| 07-09-2023 02:00:00 | 406.5 | 206.9 | -44.6 | 200.1 | -49.3 |
| 07-09-2023 02:15:00 | 407.0 | 200.5 | -45.1 | 193.4 | -49.8 |
| 07-09-2023 02:30:00 | 407.0 | 200.2 | -45.8 | 193.1 | -50.5 |
| 07-09-2023 02:45:00 | 407.0 | 206.0 | -45.1 | 198.9 | -50.0 |
| 07-09-2023 03:00:00 | 407.0 | 209.9 | -45.7 | 202.2 | -50.9 |
| 07-09-2023 03:15:00 | 407.0 | 203.4 | -47.0 | 194.9 | -52.4 |
| 07-09-2023 03:30:00 | 407.0 | 199.9 | -47.8 | 190.0 | -53.9 |
| 07-09-2023 03:45:00 | 407.0 | 199.1 | -47.8 | 195.0 | -51.1 |
| 07-09-2023 04:00:00 | 407.5 | 202.1 | -49.6 | 193.7 | -55.0 |
| 07-09-2023 04:15:00 | 407.4 | 204.9 | -48.8 | 196.1 | -54.5 |
| 07-09-2023 04:30:00 | 407.4 | 202.4 | -48.9 | 193.3 | -54.7 |
| 07-09-2023 04:45:00 | 407.8 | 200.6 | -48.5 | 191.3 | -54.4 |
| 07-09-2023 05:00:00 | 408.0 | 199.6 | -49.4 | 190.0 | -55.3 |
| 07-09-2023 05:15:00 | 407.4 | 211.3 | -48.2 | 201.0 | -54.6 |
| 07-09-2023 05:30:00 | 408.0 | 218.2 | -49.3 | 207.5 | -56.1 |
| 07-09-2023 05:45:00 | 408.0 | 223.6 | -48.9 | 212.6 | -56.0 |
| 07-09-2023 06:00:00 | 408.0 | 233.7 | -50.1 | 222.3 | -57.7 |
| 07-09-2023 06:15:00 | 408.2 | 239.1 | -50.2 | 227.2 | -58.2 |
| 07-09-2023 06:30:00 | 407.4 | 238.3 | -46.5 | 226.3 | -54.5 |
| 07-09-2023 06:45:00 | 407.3 | 241.5 | -45.7 | 229.4 | -54.1 |
| 07-09-2023 07:00:00 | 407.0 | 241.5 | -45.4 | 229.3 | -53.5 |
| 07-09-2023 07:15:00 | 407.0 | 249.1 | -45.1 | 236.5 | -53.8 |
| 07-09-2023 07:30:00 | 407.0 | 245.7 | -42.5 | 233.2 | -51.3 |
| 07-09-2023 07:45:00 | 407.0 | 251.0 | -43.3 | 238.3 | -52.3 |
| 07-09-2023 08:00:00 | 407.0 | 249.0 | -43.1 | 236.7 | -51.8 |
| 07-09-2023 08:15:00 | 407.0 | 247.3 | -42.7 | 234.5 | -51.4 |
| 07-09-2023 08:30:00 | 407.0 | 234.9 | -41.9 | 222.4 | -50.3 |
| 07-09-2023 08:45:00 | 406.9 | 218.0 | -43.8 | 206.2 | -51.3 |
| 07-09-2023 09:00:00 | 406.9 | 206.7 | -42.7 | 195.4 | -49.7 |
| 07-09-2023 09:15:00 | 406.1 | 194.5 | -38.0 | 184.0 | -44.9 |
| 07-09-2023 09:30:00 | 406.0 | 194.3 | -37.9 | 183.4 | -45.1 |
| 07-09-2023 09:45:00 | 406.1 | 186.0 | -42.7 | 175.1 | -49.2 |
| 07-09-2023 10:00:00 | 406.0 | 175.5 | -43.0 | 165.2 | -49.0 |
| 07-09-2023 10:15:00 | 406.0 | 164.1 | -41.9 | 154.1 | -47.5 |
| 07-09-2023 10:30:00 | 406.0 | 153.7 | -37.9 | 144.4 | -43.2 |
| 07-09-2023 10:45:00 | 405.9 | 150.8 | -37.2 | 141.8 | -42.4 |
| 07-09-2023 11:00:00 | 405.9 | 148.7 | -36.8 | 139.4 | -42.1 |
| 07-09-2023 11:15:00 | 406.0 | 151.8 | -36.6 | 142.8 | -41.8 |
| 07-09-2023 11:30:00 | 406.0 | 140.4 | -34.0 | 131.5 | -39.0 |
| 07-09-2023 11:45:00 | 405.8 | 128.3 | -32.6 | 120.1 | -37.1 |
| 07-09-2023 12:00:00 | 405.6 | 127.3 | -31.3 | 119.2 | -35.9 |
| 07-09-2023 12:15:00 | 405.0 | 120.9 | -30.0 | 113.4 | -34.3 |
| 07-09-2023 12:30:00 | 405.8 | 116.9 | -29.7 | 110.1 | -33.8 |
| 07-09-2023 12:45:00 | 405.4 | 118.3 | -30.5 | 111.0 | -34.6 |
| 07-09-2023 13:00:00 | 405.3 | 119.9 | -31.1 | 112.1 | -35.5 |
| 07-09-2023 13:15:00 | 406.0 | 118.6 | -33.1 | 110.9 | -37.3 |
| 07-09-2023 13:30:00 | 406.0 | 127.4 | -34.8 | 119.4 | -39.3 |
| 07-09-2023 13:45:00 | 406.0 | 133.4 | -34.2 | 125.4 | -39.0 |
| 07-09-2023 14:00:00 | 406.0 | 147.9 | -35.4 | 140.4 | -40.1 |
| 07-09-2023 14:15:00 | 406.7 | 159.1 | -36.0 | 150.7 | -41.4 |
| 07-09-2023 14:30:00 | 406.0 | 160.7 | -34.0 | 151.7 | -39.8 |
| 07-09-2023 14:45:00 | 406.0 | 162.2 | -37.0 | 152.6 | -42.9 |
| 07-09-2023 15:00:00 | 406.0 | 160.3 | -38.0 | 150.6 | -43.9 |
| 07-09-2023 15:15:00 | 406.2 | 174.0 | -43.3 | 163.5 | -49.3 |
| 07-09-2023 15:30:00 | 406.7 | 184.8 | -43.9 | 173.8 | -50.4 |
| 07-09-2023 15:45:00 | 406.0 | 181.9 | -42.3 | 170.6 | -49.0 |

| | | | | | |
|---|---|---|---|---|---|
| 07-09-2023 16:00:00 | 406.4 | 184.3 | -42.5 | 172.7 | -49.5 |
| 07-09-2023 16:15:00 | 406.9 | 187.5 | -43.0 | 175.8 | -50.0 |
| 07-09-2023 16:30:00 | 406.0 | 188.9 | -41.2 | 177.4 | -48.3 |
| 07-09-2023 16:45:00 | 406.0 | 192.0 | -42.1 | 180.2 | -49.4 |
| 07-09-2023 17:00:00 | 406.1 | 192.2 | -45.3 | 180.3 | -52.4 |
| 07-09-2023 17:15:00 | 407.0 | 184.9 | -48.9 | 173.2 | -55.4 |
| 07-09-2023 17:30:00 | 406.3 | 184.8 | -47.4 | 172.9 | -54.1 |
| 07-09-2023 17:45:00 | 407.0 | 180.8 | -47.2 | 169.1 | -53.7 |
| 07-09-2023 18:00:00 | 406.2 | 182.0 | -45.5 | 170.2 | -52.2 |
| 07-09-2023 18:15:00 | 406.0 | 170.8 | -42.6 | 160.0 | -48.7 |
| 07-09-2023 18:30:00 | 405.0 | 163.2 | -38.6 | 154.4 | -44.0 |
| 07-09-2023 18:45:00 | 405.0 | 163.9 | -36.5 | 154.1 | -42.6 |
| 07-09-2023 19:00:00 | 405.0 | 161.2 | -35.8 | 151.1 | -42.0 |
| 07-09-2023 19:15:00 | 405.9 | 140.7 | -38.0 | 151.0 | -44.0 |
| 07-09-2023 19:30:00 | 406.0 | 131.5 | -37.9 | 151.0 | -43.9 |
| 07-09-2023 19:45:00 | 405.0 | 156.9 | -39.1 | 146.8 | -45.0 |
| 07-09-2023 20:00:00 | 405.0 | 156.4 | -41.4 | 146.0 | -47.2 |
| 07-09-2023 20:15:00 | 405.4 | 158.3 | -41.4 | 147.9 | -47.2 |
| 07-09-2023 20:30:00 | 405.0 | 161.1 | -40.9 | 150.5 | -46.8 |
| 07-09-2023 20:45:00 | 405.0 | 163.1 | -38.5 | 152.5 | -44.7 |
| 07-09-2023 21:00:00 | 405.0 | 162.4 | -37.2 | 151.8 | -43.4 |
| 07-09-2023 21:15:00 | 405.1 | 167.6 | -38.4 | 156.8 | -44.9 |
| 07-09-2023 21:30:00 | 405.7 | 168.5 | -41.3 | 157.3 | -47.6 |
| 07-09-2023 21:45:00 | 405.5 | 166.8 | -41.7 | 155.6 | -47.9 |
| 07-09-2023 22:00:00 | 406.0 | 174.6 | -43.5 | 163.0 | -50.0 |
| 07-09-2023 22:15:00 | 406.0 | 172.1 | -43.8 | 160.4 | -50.2 |
| 07-09-2023 22:30:00 | 406.0 | 165.9 | -41.1 | 154.7 | -47.2 |
| 07-09-2023 22:45:00 | 406.0 | 155.5 | -40.2 | 144.7 | -46.0 |
| 07-09-2023 23:00:00 | 406.0 | 152.5 | -40.2 | 142.0 | -46.0 |
| 07-09-2023 23:15:00 | 405.9 | 155.1 | -39.5 | 144.5 | -45.4 |
| 07-09-2023 23:30:00 | 405.0 | 160.3 | -40.2 | 149.1 | -46.5 |
| 07-09-2023 23:45:00 | 405.9 | 164.3 | -42.0 | 153.0 | -48.2 |
| 08-09-2023 00:00:00 | 405.8 | 166.3 | -44.3 | 154.8 | -50.5 |
| 08-09-2023 00:15:00 | 406.0 | 170.3 | -45.0 | 158.3 | -51.4 |
| 08-09-2023 00:30:00 | 406.0 | 174.2 | -44.9 | 162.1 | -51.4 |
| 08-09-2023 00:45:00 | 406.0 | 174.3 | -44.0 | 162.3 | -50.7 |
| 08-09-2023 01:00:00 | 406.0 | 172.1 | -43.4 | 160.3 | -49.9 |
| 08-09-2023 01:15:00 | 406.0 | 172.0 | -44.5 | 160.1 | -51.1 |
| 08-09-2023 01:30:00 | 406.2 | 175.0 | -46.1 | 162.7 | -52.7 |
| 08-09-2023 01:45:00 | 407.0 | 183.3 | -48.2 | 170.4 | -55.1 |
| 08-09-2023 02:00:00 | 407.0 | 180.2 | -49.3 | 167.5 | -56.0 |
| 08-09-2023 02:15:00 | 407.0 | 182.3 | -49.5 | 169.3 | -56.1 |
| 08-09-2023 02:30:00 | 407.0 | 185.1 | -51.3 | 171.9 | -58.3 |
| 08-09-2023 02:45:00 | 407.0 | 190.8 | -53.6 | 177.2 | -60.8 |
| 08-09-2023 03:00:00 | 407.0 | 195.2 | -54.1 | 181.3 | -61.4 |
| 08-09-2023 03:15:00 | 407.3 | 196.3 | -54.0 | 182.4 | -61.3 |
| 08-09-2023 03:30:00 | 407.5 | 195.1 | -53.7 | 181.2 | -61.0 |
| 08-09-2023 03:45:00 | 407.2 | 191.8 | -54.4 | 178.0 | -61.4 |
| 08-09-2023 04:00:00 | 407.8 | 188.4 | -55.1 | 174.5 | -62.0 |
| 08-09-2023 04:15:00 | 407.6 | 192.6 | -55.4 | 178.6 | -62.5 |
| 08-09-2023 04:30:00 | 408.0 | 197.2 | -56.3 | 183.0 | -63.6 |
| 08-09-2023 04:45:00 | 408.0 | 199.0 | -57.1 | 184.6 | -64.5 |
| 08-09-2023 05:00:00 | 408.0 | 205.3 | -56.8 | 190.7 | -64.5 |
| 08-09-2023 05:15:00 | 408.0 | 209.5 | -55.2 | 194.4 | -63.4 |
| 08-09-2023 05:30:00 | 408.0 | 212.7 | -54.3 | 197.8 | -62.7 |
| 08-09-2023 05:45:00 | 407.9 | 225.4 | -53.7 | 209.7 | -62.7 |
| 08-09-2023 06:00:00 | 407.8 | 230.9 | -51.4 | 214.8 | -60.8 |
| 08-09-2023 06:15:00 | 407.7 | 235.7 | -50.9 | 219.4 | -60.6 |
| 08-09-2023 06:30:00 | 406.9 | 237.2 | -48.1 | 221.1 | -58.0 |
| 08-09-2023 06:45:00 | 407.0 | 243.8 | -48.2 | 227.3 | -58.6 |
| 08-09-2023 07:00:00 | 407.0 | 244.8 | -48.0 | 228.2 | -58.4 |
| 08-09-2023 07:15:00 | 407.0 | 249.5 | -47.2 | 232.7 | -57.9 |
| 08-09-2023 07:30:00 | 407.0 | 249.8 | -46.2 | 233.0 | -57.0 |
| 08-09-2023 07:45:00 | 407.0 | 248.2 | -47.7 | 231.5 | -58.4 |
| 08-09-2023 08:00:00 | 407.0 | 245.8 | -47.5 | 229.1 | -58.0 |
| 08-09-2023 08:15:00 | 406.8 | 242.5 | -47.0 | 225.9 | -57.3 |
| 08-09-2023 08:30:00 | 407.0 | 247.9 | -46.4 | 231.0 | -57.1 |
| 08-09-2023 08:45:00 | 407.0 | 250.3 | -45.9 | 233.3 | -56.7 |
| 08-09-2023 09:00:00 | 406.7 | 242.9 | -45.6 | 226.3 | -56.2 |
| 08-09-2023 09:15:00 | 407.0 | 234.9 | -47.6 | 218.9 | -57.7 |
| 08-09-2023 09:30:00 | 407.0 | 229.6 | -46.9 | 213.8 | -56.6 |
| 08-09-2023 09:45:00 | 406.7 | 221.7 | -44.4 | 206.6 | -53.8 |
| 08-09-2023 10:00:00 | 406.8 | 212.2 | -44.9 | 197.6 | -53.8 |
| 08-09-2023 10:15:00 | 406.6 | 204.6 | -43.5 | 190.6 | -51.9 |
| 08-09-2023 10:30:00 | 407.0 | 192.7 | -42.4 | 179.3 | -50.3 |
| 08-09-2023 10:45:00 | 407.0 | 179.2 | -40.0 | 166.7 | -47.4 |
| 08-09-2023 11:00:00 | 407.0 | 160.7 | -39.7 | 149.3 | -46.1 |
| 08-09-2023 11:15:00 | 407.0 | 152.8 | -40.2 | 141.8 | -46.2 |
| 08-09-2023 11:30:00 | 407.0 | 148.0 | -39.5 | 137.0 | -45.3 |
| 08-09-2023 11:45:00 | 407.0 | 142.9 | -38.9 | 132.4 | -44.4 |
| 08-09-2023 12:00:00 | 407.1 | 145.8 | -39.1 | 135.1 | -45.0 |
| 08-09-2023 12:15:00 | 407.2 | 151.7 | -41.8 | 140.6 | -47.8 |
| 08-09-2023 12:30:00 | 407.0 | 160.7 | -42.4 | 148.8 | -48.8 |
| 08-09-2023 12:45:00 | 407.7 | 157.7 | -44.5 | 145.7 | -50.7 |
| 08-09-2023 13:00:00 | 407.1 | 158.6 | -43.6 | 146.6 | -50.0 |
| 08-09-2023 13:15:00 | 407.7 | 154.3 | -46.6 | 142.4 | -52.6 |
| 08-09-2023 13:30:00 | 408.3 | 153.6 | -48.3 | 141.5 | -54.1 |
| 08-09-2023 13:45:00 | 408.3 | 152.4 | -47.7 | 140.4 | -53.5 |
| 08-09-2023 14:00:00 | 408.0 | 153.3 | -47.6 | 141.4 | -53.5 |
| 08-09-2023 14:15:00 | 408.0 | 163.2 | -48.6 | 150.4 | -55.0 |
| 08-09-2023 14:30:00 | 407.3 | 172.6 | -46.9 | 159.3 | -53.8 |
| 08-09-2023 14:45:00 | 407.8 | 178.5 | -48.1 | 164.9 | -55.4 |
| 08-09-2023 15:00:00 | 407.4 | 186.2 | -48.1 | 172.1 | -55.8 |
| 08-09-2023 15:15:00 | 407.0 | 188.6 | -47.1 | 174.3 | -55.1 |
| 08-09-2023 15:30:00 | 407.2 | 187.5 | -47.8 | 173.0 | -55.5 |
| 08-09-2023 15:45:00 | 407.5 | 189.6 | -50.1 | 175.1 | -57.8 |
| 08-09-2023 16:00:00 | 407.1 | 198.6 | -48.5 | 183.6 | -56.7 |
| 08-09-2023 16:15:00 | 407.0 | 206.3 | -49.0 | 190.7 | -57.8 |
| 08-09-2023 16:30:00 | 407.0 | 217.9 | -49.3 | 201.9 | -58.6 |
| 08-09-2023 16:45:00 | 407.0 | 239.6 | -48.7 | 222.4 | -59.2 |
| 08-09-2023 17:00:00 | 407.0 | 245.1 | -48.6 | 227.5 | -59.4 |
| 08-09-2023 17:15:00 | 407.0 | 240.2 | -49.2 | 222.8 | -59.5 |
| 08-09-2023 17:30:00 | 406.7 | 245.6 | -48.6 | 228.0 | -59.2 |
| 08-09-2023 17:45:00 | 406.7 | 245.6 | -47.5 | 228.0 | -58.3 |
| 08-09-2023 18:00:00 | 406.2 | 238.0 | -46.2 | 220.9 | -56.7 |
| 08-09-2023 18:15:00 | 405.7 | 225.5 | -42.4 | 209.2 | -52.3 |
| 08-09-2023 18:30:00 | 405.2 | 212.6 | -38.6 | 197.1 | -48.1 |
| 08-09-2023 18:45:00 | 405.0 | 204.1 | -37.0 | 189.3 | -46.1 |
| 08-09-2023 19:00:00 | 405.0 | 203.1 | -36.4 | 188.4 | -45.4 |
| 08-09-2023 19:15:00 | 405.0 | 199.7 | -35.7 | 185.1 | -44.7 |
| 08-09-2023 19:30:00 | 405.0 | 195.6 | -34.9 | 181.2 | -43.8 |
| 08-09-2023 19:45:00 | 405.0 | 191.6 | -35.6 | 177.5 | -44.3 |
| 08-09-2023 20:00:00 | 405.0 | 182.9 | -36.3 | 169.3 | -44.5 |
| 08-09-2023 20:15:00 | 405.0 | 176.2 | -36.6 | 163.1 | -44.3 |
| 08-09-2023 20:30:00 | 405.3 | 181.4 | -37.3 | 168.7 | -44.9 |
| 08-09-2023 20:45:00 | 405.0 | 189.8 | -37.5 | 176.4 | -45.7 |
| 08-09-2023 21:00:00 | 405.0 | 189.8 | -37.3 | 176.3 | -45.6 |
| 08-09-2023 21:15:00 | 405.0 | 190.3 | -39.1 | 176.0 | -47.2 |
| 08-09-2023 21:30:00 | 405.3 | 185.0 | -39.4 | 170.9 | -47.6 |
| 08-09-2023 21:45:00 | 405.3 | 183.5 | -41.2 | 172.2 | -47.8 |
| 08-09-2023 22:00:00 | 405.7 | 185.9 | -43.3 | 176.0 | -49.3 |
| 08-09-2023 22:15:00 | 406.0 | 186.1 | -42.3 | 175.0 | -49.0 |
| 08-09-2023 22:30:00 | 405.7 | 187.7 | -41.2 | 175.8 | -48.2 |
| 08-09-2023 22:45:00 | 406.0 | 187.5 | -41.8 | 175.1 | -49.1 |
| 08-09-2023 23:00:00 | 406.0 | 187.3 | -42.7 | 175.2 | -49.6 |
| 08-09-2023 23:15:00 | 405.7 | 183.8 | -41.8 | 171.5 | -48.8 |
| 08-09-2023 23:30:00 | 406.0 | 188.1 | -43.6 | 175.3 | -50.9 |
| 08-09-2023 23:45:00 | 406.0 | 193.2 | -45.1 | 180.8 | -52.2 |
| 09-09-2023 00:00:00 | 406.0 | 191.8 | -46.7 | 179.2 | -54.0 |
| 09-09-2023 00:15:00 | 406.0 | 192.4 | -46.7 | 181.0 | -53.3 |
| 09-09-2023 00:30:00 | 406.0 | 194.5 | -47.5 | 181.6 | -55.1 |
| 09-09-2023 00:45:00 | 406.0 | 193.9 | -48.4 | 180.5 | -56.0 |
| 09-09-2023 01:00:00 | 406.0 | 192.2 | -49.2 | 178.8 | -56.5 |
| 09-09-2023 01:15:00 | 406.2 | 194.7 | -50.2 | 182.9 | -57.0 |
| 09-09-2023 01:30:00 | 406.0 | 195.3 | -51.2 | 181.0 | -59.1 |
| 09-09-2023 01:45:00 | 406.4 | 198.0 | -52.3 | 183.3 | -60.1 |
| 09-09-2023 02:00:00 | 407.0 | 197.4 | -53.2 | 182.8 | -61.1 |
| 09-09-2023 02:15:00 | 407.0 | 197.5 | -54.1 | 182.4 | -61.8 |
| 09-09-2023 02:30:00 | 407.0 | 201.3 | -55.0 | 185.8 | -63.0 |
| 09-09-2023 02:45:00 | 407.0 | 197.9 | -55.4 | 182.8 | -63.1 |
| 09-09-2023 03:00:00 | 406.9 | 198.6 | -56.0 | 182.7 | -63.9 |
| 09-09-2023 03:15:00 | 407.0 | 201.2 | -55.5 | 185.4 | -63.5 |
| 09-09-2023 03:30:00 | 407.3 | 204.1 | -56.4 | 188.2 | -64.5 |
| 09-09-2023 03:45:00 | 407.0 | 203.9 | -57.3 | 187.4 | -65.6 |
| 09-09-2023 04:00:00 | 407.0 | 203.3 | -57.8 | 186.8 | -66.0 |
| 09-09-2023 04:15:00 | 407.5 | 206.5 | -57.9 | 189.6 | -66.2 |
| 09-09-2023 04:30:00 | 407.1 | 213.5 | -57.6 | 196.8 | -66.2 |
| 09-09-2023 04:45:00 | 407.0 | 214.6 | -56.3 | 197.5 | -65.2 |
| 09-09-2023 05:00:00 | 407.0 | 213.5 | -54.8 | 197.9 | -63.3 |

| | | | | | |
|---|---|---|---|---|---|
| 09-09-2023 05:15:00 | 407.3 | 224.1 | -57.2 | 206.6 | -66.4 |
| 09-09-2023 05:30:00 | 407.3 | 238.3 | -56.5 | 219.8 | -66.6 |
| 09-09-2023 05:45:00 | 407.2 | 247.5 | -56.3 | 231.0 | -66.1 |
| 09-09-2023 06:00:00 | 407.3 | 255.0 | -54.0 | 236.4 | -64.9 |
| 09-09-2023 06:15:00 | 407.2 | 262.0 | -50.5 | 243.0 | -62.0 |
| 09-09-2023 06:30:00 | 407.0 | 263.9 | -48.8 | 247.7 | -59.4 |
| 09-09-2023 06:45:00 | 407.0 | 259.9 | -47.2 | 243.6 | -58.0 |
| 09-09-2023 07:00:00 | 407.0 | 260.8 | -46.6 | 244.1 | -57.8 |
| 09-09-2023 07:15:00 | 406.7 | 266.9 | -44.9 | 250.6 | -56.3 |
| 09-09-2023 07:30:00 | 406.5 | 268.2 | -45.4 | 250.8 | -57.2 |
| 09-09-2023 07:45:00 | 407.0 | 267.9 | -46.3 | 249.9 | -58.3 |
| 09-09-2023 08:00:00 | 407.0 | 265.9 | -46.8 | 246.5 | -59.2 |
| 09-09-2023 08:15:00 | 407.0 | 264.2 | -46.5 | 246.1 | -58.4 |
| 09-09-2023 08:30:00 | 406.2 | 260.4 | -44.3 | 243.0 | -55.7 |
| 09-09-2023 08:45:00 | 406.3 | 263.2 | -44.6 | 245.1 | -56.6 |
| 09-09-2023 09:00:00 | 406.2 | 250.6 | -45.1 | 234.7 | -55.4 |
| 09-09-2023 09:15:00 | 406.3 | 234.4 | -45.7 | 225.4 | -52.2 |
| 09-09-2023 09:30:00 | 407.0 | 227.9 | -47.3 | 218.0 | -54.1 |
| 09-09-2023 09:45:00 | 407.0 | 204.1 | -45.9 | 195.8 | -51.5 |
| 09-09-2023 10:00:00 | 407.0 | 142.6 | -44.1 | 133.0 | -49.3 |
| 09-09-2023 10:15:00 | 407.4 | 128.5 | -44.4 | 118.9 | -49.0 |
| 09-09-2023 10:30:00 | 407.2 | 126.2 | -44.2 | 115.8 | -48.9 |
| 09-09-2023 10:45:00 | 407.7 | 117.5 | -42.8 | 107.4 | -47.2 |
| 09-09-2023 11:00:00 | 407.2 | 100.1 | -40.4 | 91.3 | -43.9 |
| 09-09-2023 11:15:00 | 407.3 | 97.7 | -38.8 | 88.9 | -42.4 |
| 09-09-2023 11:30:00 | 407.0 | 99.6 | -37.2 | 91.7 | -40.8 |
| 09-09-2023 11:45:00 | 406.8 | 96.9 | -38.1 | 89.0 | -41.5 |
| 09-09-2023 12:00:00 | 407.2 | 97.2 | -39.8 | 89.3 | -43.2 |
| 09-09-2023 12:15:00 | 407.5 | 91.0 | -39.1 | 83.3 | -42.1 |
| 09-09-2023 12:30:00 | 407.0 | 97.2 | -39.1 | 88.6 | -42.6 |
| 09-09-2023 12:45:00 | 407.7 | 91.4 | -41.6 | 84.0 | -44.4 |
| 09-09-2023 13:00:00 | 407.6 | 92.3 | -42.5 | 84.6 | -45.5 |
| 09-09-2023 13:15:00 | 408.1 | 92.7 | -45.8 | 85.3 | -48.5 |
| 09-09-2023 13:30:00 | 408.0 | 89.9 | -44.7 | 82.3 | -47.5 |
| 09-09-2023 13:45:00 | 407.8 | 87.8 | -43.7 | 80.3 | -46.4 |
| 09-09-2023 14:00:00 | 407.9 | 91.5 | -44.0 | 84.0 | -46.9 |
| 09-09-2023 14:15:00 | 408.0 | 98.3 | -44.8 | 89.9 | -48.1 |
| 09-09-2023 14:30:00 | 407.9 | 102.7 | -45.0 | 94.4 | -48.4 |
| 09-09-2023 14:45:00 | 407.3 | 108.9 | -44.2 | 100.0 | -48.1 |
| 09-09-2023 15:00:00 | 407.0 | 126.4 | -44.8 | 116.5 | -49.6 |
| 09-09-2023 15:15:00 | 407.0 | 139.6 | -46.5 | 128.6 | -51.8 |
| 09-09-2023 15:30:00 | 406.4 | 152.5 | -46.0 | 140.1 | -52.3 |
| 09-09-2023 15:45:00 | 406.0 | 162.0 | -45.9 | 149.0 | -52.7 |
| 09-09-2023 16:00:00 | 406.0 | 164.8 | -46.3 | 152.0 | -53.2 |
| 09-09-2023 16:15:00 | 406.8 | 166.9 | -48.5 | 154.1 | -55.3 |
| 09-09-2023 16:30:00 | 407.0 | 182.5 | -41.9 | 169.1 | -50.0 |
| 09-09-2023 16:45:00 | 407.0 | 211.4 | -41.9 | 196.7 | -51.2 |
| 09-09-2023 17:00:00 | 407.3 | 216.2 | -41.0 | 201.7 | -50.5 |
| 09-09-2023 17:15:00 | 407.6 | 226.6 | -43.7 | 211.5 | -53.5 |
| 09-09-2023 17:30:00 | 407.1 | 232.3 | -40.6 | 216.8 | -51.0 |
| 09-09-2023 17:45:00 | 407.0 | 234.9 | -37.8 | 218.9 | -48.7 |
| 09-09-2023 18:00:00 | 407.0 | 225.7 | -37.2 | 209.6 | -47.8 |
| 09-09-2023 18:15:00 | 406.3 | 212.1 | -33.4 | 197.6 | -43.3 |
| 09-09-2023 18:30:00 | 405.6 | 211.8 | -29.5 | 198.2 | -39.2 |
| 09-09-2023 18:45:00 | 405.2 | 205.5 | -28.9 | 190.9 | -38.9 |
| 09-09-2023 19:00:00 | 405.2 | 208.4 | -29.2 | 193.5 | -39.3 |
| 09-09-2023 19:15:00 | 405.0 | 203.0 | -28.2 | 189.1 | -38.0 |
| 09-09-2023 19:30:00 | 405.0 | 200.8 | -28.5 | 186.5 | -38.0 |
| 09-09-2023 19:45:00 | 405.0 | 209.7 | -29.6 | 195.3 | -39.4 |
| 09-09-2023 20:00:00 | 405.0 | 207.0 | -30.4 | 192.0 | -40.4 |
| 09-09-2023 20:15:00 | 405.0 | 208.0 | -30.7 | 192.2 | -40.9 |
| 09-09-2023 20:30:00 | 405.0 | 212.8 | -31.3 | 196.3 | -41.9 |
| 09-09-2023 20:45:00 | 405.0 | 209.7 | -28.5 | 193.6 | -39.1 |
| 09-09-2023 21:00:00 | 404.8 | 208.3 | -27.8 | 193.9 | -37.9 |
| 09-09-2023 21:15:00 | 405.0 | 212.8 | -29.0 | 197.3 | -39.6 |
| 09-09-2023 21:30:00 | 405.0 | 209.9 | -28.9 | 195.4 | -39.2 |
| 09-09-2023 21:45:00 | 405.1 | 210.2 | -30.4 | 196.1 | -40.3 |
| 09-09-2023 22:00:00 | 405.4 | 213.0 | -32.5 | 198.2 | -42.6 |
| 09-09-2023 22:15:00 | 405.4 | 213.5 | -33.0 | 200.7 | -42.1 |
| 09-09-2023 22:30:00 | 405.0 | 212.0 | -31.2 | 209.0 | -34.6 |
| 09-09-2023 22:45:00 | 405.0 | 213.6 | -30.9 | 210.6 | -34.2 |
| 09-09-2023 23:00:00 | 405.0 | 203.4 | -29.3 | 197.2 | -34.5 |
| 09-09-2023 23:15:00 | 405.0 | 198.9 | -28.4 | 192.7 | -33.5 |
| 09-09-2023 23:30:00 | 405.0 | 198.5 | -28.4 | 194.6 | -32.3 |
| 09-09-2023 23:45:00 | 405.0 | 199.9 | -30.2 | 191.3 | -36.8 |
| 10-09-2023 00:00:00 | 405.0 | 205.1 | -31.8 | 195.4 | -39.1 |
| 10-09-2023 00:15:00 | 405.8 | 209.1 | -32.9 | 199.1 | -40.3 |
| 10-09-2023 00:30:00 | 405.6 | 213.2 | -34.3 | 202.7 | -42.1 |
| 10-09-2023 00:45:00 | 405.6 | 218.9 | -36.4 | 207.9 | -44.4 |
| 10-09-2023 01:00:00 | 405.8 | 221.7 | -37.6 | 209.5 | -46.2 |
| 10-09-2023 01:15:00 | 405.9 | 225.2 | -39.2 | 213.0 | -47.6 |
| 10-09-2023 01:30:00 | 406.0 | 219.7 | -38.7 | 207.6 | -47.0 |
| 10-09-2023 01:45:00 | 406.0 | 222.6 | -39.9 | 210.2 | -48.3 |
| 10-09-2023 02:00:00 | 406.0 | 215.2 | -40.5 | 202.9 | -48.8 |
| 10-09-2023 02:15:00 | 407.0 | 214.6 | -41.1 | 201.8 | -49.6 |
| 10-09-2023 02:30:00 | 407.0 | 214.7 | -42.3 | 200.9 | -51.2 |
| 10-09-2023 02:45:00 | 406.8 | 217.9 | -43.4 | 203.5 | -52.4 |
| 10-09-2023 03:00:00 | 407.0 | 215.6 | -44.3 | 202.4 | -52.8 |
| 10-09-2023 03:15:00 | 407.0 | 212.1 | -44.7 | 199.8 | -52.6 |
| 10-09-2023 03:30:00 | 407.0 | 199.6 | -43.7 | 188.3 | -51.0 |
| 10-09-2023 03:45:00 | 407.0 | 189.0 | -44.4 | 177.5 | -51.4 |
| 10-09-2023 04:00:00 | 407.8 | 182.1 | -44.7 | 170.7 | -51.5 |
| 10-09-2023 04:15:00 | 408.0 | 189.6 | -44.9 | 177.6 | -52.3 |
| 10-09-2023 04:30:00 | 407.5 | 200.5 | -45.9 | 187.4 | -54.0 |
| 10-09-2023 04:45:00 | 408.0 | 214.5 | -46.9 | 200.6 | -55.6 |
| 10-09-2023 05:00:00 | 407.6 | 218.2 | -46.7 | 204.5 | -55.3 |
| 10-09-2023 05:15:00 | 407.6 | 225.4 | -46.8 | 211.3 | -55.9 |
| 10-09-2023 05:30:00 | 407.5 | 232.5 | -45.2 | 218.1 | -54.6 |
| 10-09-2023 05:45:00 | 407.7 | 242.4 | -45.8 | 227.2 | -55.9 |
| 10-09-2023 06:00:00 | 408.0 | 253.0 | -44.5 | 237.2 | -55.4 |
| 10-09-2023 06:15:00 | 407.6 | 254.2 | -44.1 | 238.5 | -54.9 |
| 10-09-2023 06:30:00 | 407.0 | 268.4 | -41.1 | 252.7 | -52.3 |
| 10-09-2023 06:45:00 | 406.8 | 286.5 | -41.1 | 270.1 | -53.1 |
| 10-09-2023 07:00:00 | 407.0 | 297.5 | -40.7 | 280.4 | -53.5 |
| 10-09-2023 07:15:00 | 407.0 | 293.5 | -40.6 | 277.2 | -52.9 |
| 10-09-2023 07:30:00 | 407.0 | 279.5 | -37.4 | 263.7 | -49.4 |
| 10-09-2023 07:45:00 | 406.7 | 272.6 | -36.1 | 257.0 | -47.8 |
| 10-09-2023 08:00:00 | 407.0 | 273.2 | -36.5 | 257.0 | -48.6 |
| 10-09-2023 08:15:00 | 407.0 | 270.4 | -36.9 | 254.2 | -48.8 |
| 10-09-2023 08:30:00 | 407.0 | 251.9 | -36.9 | 236.5 | -48.0 |
| 10-09-2023 08:45:00 | 407.0 | 228.1 | -35.9 | 214.1 | -45.8 |
| 10-09-2023 09:00:00 | 407.4 | 204.5 | -37.2 | 191.7 | -45.8 |
| 10-09-2023 09:15:00 | 408.0 | 177.8 | -36.4 | 166.7 | -43.6 |
| 10-09-2023 09:30:00 | 407.9 | 163.1 | -37.9 | 153.2 | -44.2 |
| 10-09-2023 09:45:00 | 408.0 | 154.2 | -35.4 | 144.4 | -41.4 |
| 10-09-2023 10:00:00 | 407.4 | 152.7 | -32.6 | 142.6 | -38.9 |
| 10-09-2023 10:15:00 | 407.9 | 144.5 | -32.7 | 134.1 | -39.1 |
| 10-09-2023 10:30:00 | 407.4 | 137.9 | -31.6 | 131.8 | -35.8 |
| 10-09-2023 10:45:00 | 407.3 | 138.3 | -33.4 | 136.7 | -35.5 |
| 10-09-2023 11:00:00 | 407.2 | 139.4 | -33.9 | 137.4 | -36.0 |
| 10-09-2023 11:15:00 | 407.5 | 140.7 | -34.4 | 138.7 | -36.6 |
| 10-09-2023 11:30:00 | 407.0 | 138.6 | -32.1 | 136.9 | -34.3 |
| 10-09-2023 11:45:00 | 407.3 | 135.8 | -33.0 | 134.0 | -35.0 |
| 10-09-2023 12:00:00 | 407.4 | 134.0 | -33.2 | 132.3 | -35.3 |
| 10-09-2023 12:15:00 | 407.6 | 127.1 | -34.5 | 125.6 | -36.4 |
| 10-09-2023 12:30:00 | 407.6 | 121.1 | -36.8 | 119.5 | -38.7 |
| 10-09-2023 12:45:00 | 407.7 | 117.1 | -33.2 | 115.7 | -35.1 |
| 10-09-2023 13:00:00 | 407.6 | 114.3 | -34.0 | 113.0 | -35.7 |
| 10-09-2023 13:15:00 | 407.8 | 108.2 | -35.5 | 106.8 | -37.4 |
| 10-09-2023 13:30:00 | 407.6 | 115.1 | -35.8 | 113.1 | -37.7 |
| 10-09-2023 13:45:00 | 408.0 | 108.2 | -39.2 | 106.4 | -41.0 |
| 10-09-2023 14:00:00 | 407.9 | 110.2 | -38.5 | 108.4 | -40.4 |
| 10-09-2023 14:15:00 | 408.0 | 115.1 | -40.1 | 113.0 | -42.2 |
| 10-09-2023 14:30:00 | 408.0 | 117.9 | -37.7 | 114.3 | -40.3 |
| 10-09-2023 14:45:00 | 407.5 | 118.7 | -36.7 | 112.1 | -40.6 |
| 10-09-2023 15:00:00 | 407.3 | 114.2 | -34.8 | 107.3 | -38.7 |
| 10-09-2023 15:15:00 | 407.3 | 106.6 | -33.9 | 100.1 | -37.6 |
| 10-09-2023 15:30:00 | 407.4 | 100.9 | -33.4 | 94.0 | -36.9 |
| 10-09-2023 15:45:00 | 407.1 | 100.6 | -33.7 | 94.0 | -37.1 |
| 10-09-2023 16:00:00 | 408.0 | 102.0 | -36.1 | 94.3 | -39.8 |
| 10-09-2023 16:15:00 | 407.8 | 103.6 | -37.8 | 95.4 | -41.6 |
| 10-09-2023 16:30:00 | 408.0 | 111.1 | -39.3 | 102.2 | -43.5 |
| 10-09-2023 16:45:00 | 408.0 | 120.6 | -41.8 | 111.8 | -46.2 |
| 10-09-2023 17:00:00 | 408.0 | 123.9 | -42.3 | 114.7 | -46.7 |
| 10-09-2023 17:15:00 | 408.4 | 125.3 | -43.8 | 115.8 | -48.3 |
| 10-09-2023 17:30:00 | 408.0 | 137.4 | -44.0 | 127.0 | -49.3 |
| 10-09-2023 17:45:00 | 408.0 | 146.2 | -43.3 | 134.7 | -49.2 |
| 10-09-2023 18:00:00 | 407.2 | 146.7 | -39.4 | 135.7 | -45.5 |
| 10-09-2023 18:15:00 | 406.2 | 137.3 | -35.6 | 127.7 | -41.1 |
| 10-09-2023 18:30:00 | 405.0 | 153.2 | -34.1 | 142.8 | -40.4 |
| 10-09-2023 18:45:00 | 404.5 | 185.0 | -32.5 | 176.1 | -38.9 |
| 10-09-2023 19:00:00 | 404.0 | 202.3 | -31.5 | 193.6 | -38.0 |
| 10-09-2023 19:15:00 | 404.0 | 214.9 | -31.0 | 205.7 | -38.1 |
| 10-09-2023 19:30:00 | 403.6 | 218.6 | -32.5 | 207.8 | -40.4 |
| 10-09-2023 19:45:00 | 404.0 | 218.9 | -32.1 | 207.6 | -40.4 |
| 10-09-2023 20:00:00 | 403.6 | 217.6 | -32.3 | 204.9 | -41.4 |
| 10-09-2023 20:15:00 | 404.0 | 211.2 | -31.3 | 199.3 | -39.8 |
| 10-09-2023 20:30:00 | 403.8 | 206.7 | -30.6 | 194.7 | -39.2 |
| 10-09-2023 20:45:00 | 403.2 | 202.9 | -28.0 | 190.7 | -37.0 |
| 10-09-2023 21:00:00 | 403.1 | 208.8 | -27.6 | 195.7 | -37.3 |
| 10-09-2023 21:15:00 | 403.4 | 217.6 | -28.4 | 204.1 | -38.3 |
| 10-09-2023 21:30:00 | 403.2 | 218.2 | -29.3 | 204.5 | -39.3 |
| 10-09-2023 21:45:00 | 403.4 | 218.6 | -30.5 | 204.3 | -40.6 |
| 10-09-2023 22:00:00 | 403.9 | 218.0 | -32.7 | 204.6 | -42.2 |
| 10-09-2023 22:15:00 | 404.0 | 219.6 | -31.1 | 206.5 | -40.7 |
| 10-09-2023 22:30:00 | 404.0 | 216.2 | -29.3 | 202.9 | -38.9 |
| 10-09-2023 22:45:00 | 403.8 | 214.0 | -32.1 | 200.7 | -41.5 |
| 10-09-2023 23:00:00 | 404.0 | 205.8 | -33.2 | 192.6 | -42.3 |
| 10-09-2023 23:15:00 | 404.0 | 201.0 | -32.0 | 187.8 | -41.2 |
| 10-09-2023 23:30:00 | 404.0 | 199.0 | -31.1 | 185.6 | -40.3 |
| 10-09-2023 23:45:00 | 404.0 | 201.0 | -32.1 | 187.6 | -41.3 |

| | |
|---|---|
| MAX | 409.0 |
| MIN | 403.1 |
| AVG | 406.2 |

Gmail SLDC DVC <dvcsldc@gmail.com>

# Fwd: Low Voltage in RTPS-Ranchi Line #3 (400KV)

1 message

**DHARMADAS TRIPATHI** <dharmadas.tripathi@dvc.gov.in> 9 October 2023 at 12:57
To: ADITI SEN PRADHAN <aditi.senpradhan@dvc.gov.in>, dvcsldc <dvcsldc@gmail.com>
Cc: DEBI PRASAD PUITANDI <debiprasad.puitandi@dvc.gov.in>, SANJAY KUMAR SHARMA <sanjay.sharma@dvc.gov.in>, VINAY KUMAR <vinay.kumar1@dvc.gov.in>

Respected Madam/ Sir,
CTC team investigated the problem of low voltage , recorded in the energy meters of 400 KV RTPS-Ranchi Ckt# 3 , installed at RTPS end. It was found that the recorded voltage in the energy meters, connected in the said line ( both main & check ; Main meter: Sl No. 1260-A , make : Genus & Check Meter : Sl No. 1267-A , make : Genus) was erroneous in different time as per available load survey record due to trouble in PT circuitry. The trouble of PT circuitry has been rectified at around 16.30 hrs of 06/10/23. Presently recording in the meters are in order.

-
Regards
Dharmadas Tripathi
DGM(E), CTC,
DVC, Maithon
9434745955

---

**From:** "VINAY KUMAR" <vinay.kumar1@dvc.gov.in>
**To:** "ADITI SEN PRADHAN" <aditi.senpradhan@dvc.gov.in>
**Cc:** "DHARMADAS TRIPATHI" <dharmadas.tripathi@dvc.gov.in>, "DHEERAJ KUMAR" <dheeraj.kumar@dvc.gov.in>
**Sent:** Monday, October 9, 2023 11:48:18 AM
**Subject:** Fwd: Low Voltage in RTPS-Ranchi Line #3 (400KV)

Respected Madam,
Trailing mail is being forwared for kind perusal regarding the observation and rectification of low voltage issues recored by meter of 400 KV RTPS-Ranchi PGCIL L#3. An excel sheet of laod survey (01 Sept 23 to 06 Oct 23) of meter HT2200265 (SEMA PH-II Meter) , which is connected with the same PT is attached for your ready reference.

सादर,

विनय कुमार
प्रबंधक,सीटीसी, दाघानि, मैथन

---

**From:** "DHEERAJ KUMAR" <dheeraj.kumar@dvc.gov.in>
**To:** "VINAY KUMAR" <vinay.kumar1@dvc.gov.in>
**Sent:** Saturday, October 7, 2023 1:21:29 PM
**Subject:** Low Voltage in RTPS-Ranchi Line #3 (400KV)

Dear Sir,
Metering Cell, CTC visited RTPS 400 kV S/Y control room to check the problem of intermittent low voltage in the meter of 400 KV RTPS-Ranchi L#3.
The following points were observed during the investigation.
(i) Instantaneous voltage in Meter found in order.
(ii) During analysis of meter reading data, it was found that intermittent low voltage was recorded in the meter in Y-Phase .
(iii) After thorough investigation, it was found that the connection at JB for Y-Ph Metering Core-3 of CVT Line #3 (400KV RTPS-Ranchi Line) was slightly loose.
(iv) Loose connections were tightened by the maintenance team.
(v) Normal Metering resumed at 16.30 hrs.
(vi) The RTPS team was requested to observe the meter voltage for the next several days and accordingly send the meter reading data to the Metering cell and SLDC.

सादर
धीरज कुमार
सहायक प्रबंधक (विद्युत),
केंद्रीय परीक्षण वृत,दा॰घा॰नि॰,मैथन
दूरभाष:९१९९४६७०५७

-

**Annexure-I**

# SUMMARY OF DEVIATION CHARGE RECEIPT AND PAYMENT STATUS

**BILL UPTO 17-12-2023 (W-38 of FY 2023-24)**
**AS on 04-01-24**

Figures in ₹ Lakhs

| CONSTITUENTS | Net outstanding for 2022-23 | Receivable by Pool | Received by Pool | Payable From Pool | Paid From Pool | Outstanding for 2023-24 | Total Outstanding |
|---|---|---|---|---|---|---|---|
| BSPTCL | 2,547.54813 | 12,809.41878 | 0.00000 | 12,867.47986 | 452.65296 | 394.59188 | 2,942.14001 |
| JUVNL | 0.00000 | 8,043.27582 | 1,648.26700 | 941.36446 | 0.00000 | 5,453.64436 | 5,453.64436 |
| DVC | 0.00000 | 9,608.88026 | 9,012.86946 | 2,594.32994 | 2,235.21112 | 236.89198 | 236.89198 |
| GRIDCO | 0.00000 | 2,658.76497 | 2,634.97373 | 14,516.57181 | 13,496.31624 | -996.46433 | -996.46433 |
| WBSETCL | 0.00000 | 2,049.43888 | 2,350.10270 | 23,985.64043 | 22,654.10917 | -1,632.19508 | -1,632.19508 |
| Sikkim | 686.22267 | 2,184.96729 | 0.00000 | 576.63110 | 0.00000 | 1,608.33619 | 2,294.55886 |
| NTPC | 0.00000 | 32,206.80605 | 29,539.09921 | 2.57267 | 2.57267 | 2,667.70684 | 2,667.70684 |
| NHPC | 0.00000 | 3.09535 | 1.37824 | 652.72566 | 650.88953 | -0.11902 | -0.11902 |
| MPL | 0.00000 | 174.64275 | 45.93437 | 1,599.75705 | 1,171.27708 | -299.77159 | -299.77159 |
| APNRL | 0.00000 | 301.72179 | 225.66132 | 314.53112 | 256.15844 | 17.68779 | 17.68779 |
| CHUZACHEN | 0.00000 | 185.58206 | 179.92317 | 95.51565 | 90.66747 | 0.81071 | 0.81071 |
| NVVN-BD | 0.00000 | 952.06172 | 926.13392 | 1,977.20402 | 1,955.98030 | 4.70408 | 4.70408 |
| GMR | 0.00000 | 298.69872 | 210.66919 | 127.26576 | 83.73027 | 44.49404 | 44.49404 |
| JITPL | 0.00000 | 983.75778 | 704.73330 | 509.13235 | 367.90999 | 0.00000 | 0.00000 |
| TPTCL (Dagachu) | 0.00000 | 280.45026 | 276.22641 | 853.78493 | 826.88566 | -22.67542 | -22.67542 |
| JLHEP | 0.00000 | 172.23723 | 147.90945 | 420.32719 | 386.79111 | -9.20830 | -9.20830 |
| NVVN-NEPAL | 0.00000 | 5,452.46995 | 5,283.52588 | 1,560.69187 | 1,535.57136 | 143.82356 | 143.82356 |
| BRBCL | 0.00000 | 750.76718 | 750.56963 | 91.77676 | 91.57921 | 0.00000 | 0.00000 |
| PGCIL SASARAM | 0.00000 | 46.60435 | 46.60435 | 6.02753 | 6.02753 | 0.00000 | 0.00000 |
| TUL (Teesta-III) | 0.00000 | 2,604.40881 | 2,520.38392 | 610.85731 | 526.83242 | 0.00000 | 0.00000 |
| Dikchu | 0.00000 | 356.14275 | 354.27064 | 637.27191 | 635.39982 | 0.00002 | 0.00002 |
| PGCIL-Alipurduar | 0.00000 | 42.38497 | 40.18180 | 6.19342 | 5.82084 | 1.83059 | 1.83059 |
| Tashiding(THEP) | 0.00000 | 40.70943 | 20.27364 | 746.45867 | 715.95686 | -10.06602 | -10.06602 |
| RONGNICHU | 0.00000 | 28.79760 | 14.32655 | 416.69036 | 394.72962 | -7.48969 | -7.48969 |
| NVVN Bhutan | 0.00000 | 344.85483 | 342.04881 | 284.25622 | 240.13680 | -41.31340 | -41.31340 |
| ECR | 0.00000 | 200.96288 | 200.73579 | 303.05416 | 302.82707 | 0.00000 | 0.00000 |
| **Total** | **3,233.77080** | **82,781.90246** | **57,476.80248** | **66,698.11221** | **49,086.03354** | **7,555.21919** | **10,788.98999** |

IND Bharat

Receivable: Receivable by ER Payable: Payable by ER POOL
Received: Received by ER P Paid: Paid by ER POOL
'- ve' Payable by ER pool '+ ve' Receivable by ER pool

**Annexure - II**

# STATUS OF REACTIVE CHARGES

AS ON 04.01.23

Figures in ₹ Lakhs

| Name of Parties | Receivable Amount by pool | Received Amount by pool | Payable Amount by pool | Paid Amount by pool | Outstanding Amount Receivable(+Ve) / Payable by pool(-Ve) |
|---|---|---|---|---|---|
| Bhutan | 24.59 | 24.59 | 3.28 | 3.28 | 0.00 |
| Bangladesh | 5.53 | 5.53 | 1.93 | 1.93 | 0.01 |
| Nepal | 29.20 | 29.20 | 4.00 | 4.00 | 0.00 |
| BSPHCL | 173.04 | 50.97 | 114.52 | 69.24 | 76.79 |
| JUVNL | 325.40 | 310.35 | 3.54 | 0.00 | 11.51 |
| DVC | 19.18 | 18.66 | 51.24 | 42.24 | -8.47 |
| GRIDCO | 202.78 | 202.78 | 76.22 | 62.43 | -13.79 |
| SIKKIM | 0.36 | 0.00 | 10.61 | 9.89 | -0.35 |
| WBSETCL | 101.32 | 60.68 | 90.50 | 72.12 | 22.27 |
| JITPL | 0.00 | 0.00 | 1.90 | 1.90 | 0.00 |
| Alipurduar | 0.13 | 0.12 | 0.00 | 0.00 | 0.01 |
| Sasaram | 0.12 | 0.00 | 0.00 | 0.00 | 0.12 |
| MPL | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| APNRL | 0.00 | 0.00 | 4.25 | 4.13 | -0.12 |
| BRBCL | 0.00 | 0.00 | 5.80 | 2.51 | -3.29 |
| JLHEP | 0.00 | 0.00 | 0.23 | 0.23 | 0.00 |
| Chuzachen | 0.12 | 0.00 | 0.11 | 0.11 | 0.12 |
| TUL | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| RHEP | 0.13 | 0.12 | 0.02 | 0.02 | 0.01 |
| THEP | 0.16 | 0.10 | 0.01 | 0.01 | 0.05 |
| Dikchu | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ECR | 1.60 | 1.60 | 1.10 | 1.10 | 0.00 |
| GMR | 0.70 | 0.65 | 0.05 | 0.05 | 0.05 |
| NHPC | 0.00 | 0.00 | 2.81 | 2.56 | -0.25 |
| NTPC | 0.89 | 0.00 | 315.79 | 232.47 | -82.43 |

Receivable: Receivable by ER POOI Payable: Payable by ER POOL
Received: Received by ER POOL Paid: Paid by ER POOL
'- ve' Payable by ER pool '+ ve' Receivable by ER pool

# Deviation Interest Bill due to delay payment

**Annexure-III**

All figs in ₹

| Sl No. | Constituent Name | Interest outstanding till Q4_2020-21 | Interest Received by Pool against outstanding | Interest Paid by pool against Outstanding | Net Interest outstanding till Q4_2020-21 |
|---|---|---|---|---|---|
| 1 | BSPTCL | 91,05,608 | 91,05,608 | | 0 |
| 2 | DVC | 23,718 | | 23,718 | 0 |
| 3 | GRIDCO | -2,79,466 | | 2,79,466 | 0 |
| 4 | JUVNL | 4,34,61,973 | 4,34,61,973 | | 0 |
| 5 | Sikkim | 11,76,865 | 11,76,865 | | 0 |
| 6 | WBSETCL | 21,415 | 21,415 | | 0 |
| 7 | NHPC | -54,745 | | 54,745 | 0 |
| 8 | NTPC | 0 | | | 0 |
| 9 | APNRL | 11,33,748 | 11,33,748 | | 0 |
| 10 | BRBCL | -1,316 | | 1,316 | 0 |
| 11 | JLHEP | 1,28,853 | 1,15,968 | 12,885 | 0 |
| 12 | CHUZACHEN | -3,119 | | 3,119 | 0 |
| 13 | GMR | 1,73,96,828 | 1,73,96,828 | | 0 |
| 14 | JITPL | 8,589 | 8,589 | | 0 |
| 15 | KBUNL | 40 | 40 | | 0 |
| 16 | MPL | -33,428 | | 33,428 | 0 |
| 17 | NPGC-Infirm | 0 | | | 0 |
| 18 | NPGC | -10,953 | | 10,953 | 0 |
| 19 | NVVN-BD | 24,603 | | 24,603 | 0 |
| 20 | NVVN-NEPAL | 0 | | | 0 |
| 21 | OPGC | 24,209 | | | 24,209 |
| 22 | PGCIL-Alipurduar | 1,72,257 | 1,72,258 | | 0 |
| 23 | PGCIL SASARAM | 1,686 | 1,686 | | 0 |
| 24 | Tashiding(THEP) | 1,57,661 | 1,57,661 | | 0 |
| 25 | Dikchu | 28,701 | 28,701 | | 0 |
| 26 | TPTCL (Dagachu) | 0 | | | 0 |
| 27 | TUL (Teesta-III) | -1,134 | | 1,134 | 0 |

'- ve' Payable by ER pool

'+ ve' Receivable by ER pool

**Note: Ind-bharath interest is calculated till 29.05.2019**

Annexure -IV

# Current Status of Letter of Credit (LC) amount against DSM charges for ER constituents

*Figures in Lacs of Rupees*

| Sl No | ER Constituents | No. of weeks in which Deviation Charge payable | No of times payment was delayed during 2022-23 | Total Deviation charges payable to pool during 2022-23 | Average weekly Deviation Charge liability | LC Amount | Defaulting Weeks | Due date of expiry | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | (C)/52 weeks | 110% of (B) | | | |
| | | (A) | (B) | (C) | (D) | (E) | (G) | (F) | (G) |
| 1 | Bihar State Power Holding Corporation Limited/ बिहार | 37 | 37 | 19124.44 | 367.78 | 404.55551 | ALL Weeks | 12-11-2023 | LC opened for ₹ 213,53,049 /- |
| 2 | Jharkhand State Electricity Board / झारखंड | 36 | 36 | 16432.86 | 316.02 | 347.61817 | ALL Weeks | 13-03-2024 | LC opened for ₹139,64,455 /- |
| 3 | Damodar Valley Corporation / डीवीसी | 39 | 2 | 12559.02 | 241.52 | 265.67154 | 25, 38 | No Valid LC | |
| 4 | Power Deptt, Govt. of Sikkim /सिक्किम | 28 | 28 | 2176.42 | 41.85 | 46.03970 | ALL Weeks | No Valid LC | |
| 5 | APNRL | 39 | 39 | 1226.93 | 23.59 | 25.95437 | ALL Weeks | 11-12-2024 | LC opened for ₹ 25,95,437 /- |
| 6 | Gati Chuzachen / चुजाचेन | 18 | 13 | 116.69 | 2.24 | 2.46842 | All weeks Except 25, 32, 41, 49, 50 | No Valid LC | |
| 7 | GMR / जीएमआर | 45 | 37 | 948.14 | 18.23 | 20.05681 | All week except 9, 10, 11, 12, 14, 15, 17, 18 | No Valid LC | |
| 8 | Jindal India Thermal Power Ltd. | 33 | 6 | 1422.66 | 27.36 | 30.09467 | 2, 3, 38, 50 | No Valid LC | |
| 9 | TPTCL Dagachu/ डागाचु | 45 | 6 | 3812.86 | 73.32 | 80.65675 | 36, 38, 39, 40, 44, 45 | 31-03-2024 | LC opened for ₹ 80,65,675 /- |
| 10 | JLHEP | 35 | 31 | 1192.36 | 22.93 | 25.22302 | All weeks Except 2, 6, 19, 27 | No Valid LC | |
| 11 | BRBCL /बीआर बीसीएल | 42 | 2 | 1738.40 | 33.43 | 36.77389 | 29, 46 | No Valid LC | |
| 12 | PGCIL-Sasaram / सासाराम | 30 | 3 | 38.17 | 0.73 | 0.80735 | 43, 52 | 31-03-2024 | LC opened for ₹ 80,735 /- |
| 13 | Dikchu | 18 | 8 | 185.40 | 3.57 | 3.92202 | 30, 37, 38, 41, 43, 45, 46, 50 | 03-05-2024 | LC opened for ₹ 392,202 /- |
| 14 | PGCIL-Alipurduar / अलीपुरदुआर | 15 | 8 | 23.14 | 0.44 | 0.48940 | 1, 2, 3, 4, 7, 8 | 31-12-2024 | LC opened for ₹ 48,940/- |
| 15 | Tashiding | 23 | 17 | 396.09 | 7.62 | 8.37890 | All weeks Except 1, 2, 4, 6, 19, 27 | No Valid LC | |

ERLDC Fees & Charges

**Annexure-IX**

| | | 2021-22 | | | | 2022-23 | | | | 2023-24 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sl No** | **Entity Name** | **Q1** | **Q2** | **Q3** | **Q4** | **Q1** | **Q2** | **Q3** | **Q4** | **Q1** | **Q2** |
| 1 | Adhunik PNRL | Yes | Yes | | | | Yes | | Yes | Yes | |
| 2 | Alipurduar HVDC | | | | | | | | | | |
| 3 | Alipurduar Transmission Limited | | | | | | | | | | |
| 4 | BARH STG-I | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 5 | BARH-II | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 6 | Bharatiya Rail Bijlee Company Ltd. | Yes | | | | Yes | Yes | | | | |
| 7 | Bihar State Power Transmission Company Ltd. | | | | | | | | Yes | | |
| 8 | Darbhanga-Motihari Transmission Company Ltd. | Yes | Yes | | | | | | | | |
| 9 | Darlipali Super Thermal Power Project | Yes | Yes | | | | | | | | |
| 10 | DVC | | | | | | | | | | |
| 11 | DVC Seller | | | | | | | | | | |
| 12 | ENICL | | | | | | | | | | |
| 13 | FSTPP-I - II | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 14 | FSTPP-III | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 15 | GATI INFRASTRUCTURE PVT. LTD | | | | | Yes | Yes | | | | Yes |
| 16 | GMR Kamalanga Energy Ltd. | | | | | | | | | | |
| 17 | GRIDCO | Yes | Yes | Yes | Yes | | | | | | |
| 18 | HVDC SASARAM | | | | | | | | | | |
| 19 | Jharkhand Bijli Vitran Nigam Limited | | | | | | | | | | |
| 20 | JINDAL INDIA THERMAL POWER LTD. | | | | | | | | | | |
| 21 | Jorethang Loop HEP | | | | | | | Yes | Yes | Yes | Yes |
| 22 | Kanti Bijlee Utpadan Nigam limited | Yes | Yes | Yes | Yes | | | Yes | Yes | Yes | Yes |
| 23 | KHSTPP-I | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 24 | KHSTPP-II | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 25 | Maithon Power Limited | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 26 | Nabinagar Power Generation Corporation Ltd. | | | | | Yes | | Yes | Yes | Yes | Yes |
| 27 | NORTH KARANPURA TRANSCO LIMITED | | | | | | | | | | |
| 28 | NVVN Bangladesh | | | | | | Yes | | | | Yes |
| 29 | NVVN Nepal | | | | | | | | | | Yes |
| 30 | Odisha Generation Phase-II Transmission Limited | | | | | | | | | | |
| 31 | PMJTL | | | | | | | | | | |
| 32 | PMTL | | | | | | | | | | |
| 33 | POWERGRID ISTS | | | | | | | | | | |
| 34 | POWERLINK ISTS | | | | | | | | | | |
| 35 | Purulia & Kharagpur Transmission Comp. Ltd. | | | | | | | | | | |
| 36 | RANGEET HEP | | | | | | | | | | |
| 37 | Rognichu HEP | | | | | Yes | | | | | |
| 38 | Shiga Energy Private Ltd | | | | | | | Yes | Yes | Yes | Yes |
| 39 | SIKKIM | | | | | | | | | | |
| 40 | Sneha Kinetic Power Project Private Ltd | | | | | | | | | | |
| 41 | TALCHER SOLAR PV POWER STATION,NTPC LIMITED | Yes | Yes | | | | | | | | |
| 42 | Tata Power Trading Company Limited | | Yes | Yes | | Yes | | | | | |
| 43 | TEESTA HEP | | | | | | | | | | |
| 44 | Teesta Urja Ltd.(Teesta -III HEP) | Yes | | | | | | | | | |
| 45 | Teestavalley Power Transmission Ltd. | | | | | | | | | | |
| 46 | TSTPP-I | Yes | Yes | | | | | | | | |
| 47 | WBSEDCL | | | | Yes | | Yes | | | Yes | |

Annexure - V

## DETAILS OF DISBURSEMENT TO POWER SYSTEM DEVELOPMENT FUND

| Sl No | Nature of Amount | Amount transferred to PSDF (Rs in Lac) | Date of Disbursement | | Remarks |
|---|---|---|---|---|---|
| | **Opening Balance (upto 31.03.2019)** | **95896.17** | | | |
| **1** | Reactive Energy Charge | 105.79202 | 04.04.19 | | Reactive Charges_18-19 |
| **2** | Reactive Energy Charge | 287.48448 | 03.05.19 | | Reactive Charges_18-19 & 19-20 |
| **3** | Reactive Energy Charge | 129.69559 | 03.06.19 | | Reactive Charges_19-20 |
| **4** | Reactive Energy Charge | 207.83840 | 04.07.19 | | Reactive Charges_19-20 |
| **5** | Reactive Energy Charge | 94.91703 | 02.08.19 | | Reactive Charges_19-20 |
| **6** | Reactive Energy Charge | 188.53681 | 02.09.19 | | Reactive Charges_19-20 |
| **7** | Surplus DSM amount transferred | 32210.51998 | 24.09.19 | | DSM Charges_19-20 |
| **8** | Reactive Energy Charge | 173.06004 | 01.10.19 | | Reactive Charges_19-20 |
| **9** | Reactive Energy Charge | 273.15002 | 01.11.19 | | Reactive Charges_19-20 |
| **10** | Reactive Energy Charge | 401.09564 | 04.12.19 | | Reactive Charges_19-20 |
| **11** | Reactive Energy Charge | 252.53573 | 02.01.20 | | Reactive Charges_19-20 |
| **12** | Reactive Energy Charge | 148.65520 | 07.02.20 | | Reactive Charges_19-20 |
| **13** | Reactive Energy Charge | 205.22437 | 04.03.20 | | Reactive Charges_19-20 |
| **14** | Bank interest from Reactive acct | 0.21706 | 03.04.20 | | Bank interest from Reactive acct |
| **15** | Reactive Energy Charge | 843.03166 | 03.06.20 | | Reactive Charges_19-20 & 20-21 |
| **16** | Reactive Energy Charge | 507.80481 | 07.07.20 | | Reactive Charges_17-18,18-19 & 20-21 |
| **17** | Reactive Energy Charge | 309.41068 | 06.08.20 | | Reactive Charges_17-18,18-19 & 20-21 |
| **18** | Reactive Energy Charge | 83.23955 | 02.09.20 | | Reactive Charges_19-20 & 20-21 |
| **19** | Bank interest of DSM A/C-TDS portion | 251.65235 | 18.09.20 | | Bank interest TDS portion transferred from POSOCO,CC |
| **20** | Bank interest of DSM A/C-TDS portion | 15.64788 | 22.09.20 | | Bank interest TDS portion transferred from POSOCO,CC |
| **21** | Reactive Energy Charge | 118.85979 | 06.10.20 | | Reactive Charges_ 20-21 |
| **22** | Reactive Energy Charge | 101.42971 | 04.11.20 | | Reactive Charges_ 20-21 |
| **23** | Reactive Energy Charge | 82.34791 | 04.12.20 | | Reactive Charges_ 20-21 |
| **24** | Reactive Energy Charge | 500.95333 | 06.01.21 | | Reactive Charges of 19-20 & 20-21 |
| **25** | Reactive Energy Charge | 92.51486 | 03.02.21 | | Reactive Charges of 19-20 & 20-21 |
| **26** | Reactive Energy Charge | 50.22963 | 04.03.21 | | Reactive Charges of 19-20 & 20-21 |
| **27** | Reactive Energy Charge | 32.15331 | 07.04.21 | | Reactive Charges of 19-20 & 20-21 |
| **28** | Reactive Energy Charge | 39.59760 | 05.05.21 | | Reactive Charges of 19-20 & 20-21 |
| **29** | Reactive Energy Charge | 18.96069 | 01.06.21 | | Reactive Charges of 20-21 & 21-22 |
| **30** | Reactive Energy Charge | 392.24613 | 12.07.21 | | Reactive Charges of 20-21 & 21-22 |
| **31** | Reactive Energy Charge | 214.22298 | 22.07.21 | | Reactive Charges 21-22 |
| **32** | Addl. Dev | 392.94201 | 25.08.21 | | DSM Charges of 19-20 received from Jharkhand |
| **33** | Addl. Dev | 5.99326 | 03.09.21 | | DSM Charges of 19-20 received from Jharkhand |
| **34** | Reactive Energy Charge | 330.73064 | 09.09.21 | | Reactive Charges 21-22 |
| **35** | Addl. Dev | 1334.97939 | 23.09.21 | | DSM Charges of 20-21 received from Bihar |
| **36** | Addl. Dev | 500.00000 | 27.09.21 | | DSM Charges of 20-21 received from Bihar |
| **37** | Addl. Dev | 1500.00000 | 29.09.21 | | DSM Charges of 20-21 received from Bihar |
| **38** | Addl. Dev | 500.00000 | 01.10.21 | | DSM Charges of 20-21 received from Bihar |
| **39** | Addl. Dev | 1000.00000 | 05.10.21 | | DSM Charges of 20-21 received from Bihar |
| **40** | Addl. Dev | 402.60050 | 05.10.21 | | DSM Charges of 20-21 received from Jharkhand |
| **41** | Reactive Energy Charge | 131.05971 | 07.10.21 | | Reactive Charges 21-22 |
| **42** | Addl. Dev | 1000.00000 | 22.10.21 | | DSM Charges of 20-21 received from Bihar |
| **43** | Addl. Dev | 1000.00000 | 26.10.21 | | DSM Charges of 20-21 received from Bihar |
| **44** | Addl. Dev | 539.21266 | 28.10.21 | | DSM Charges of 20-21 received from Bihar |
| **45** | Reactive Energy Charge | 224.70676 | 03.11.21 | | Reactive Charges 21-22 |
| **46** | Reactive Energy Charge | 366.25533 | 03.12.21 | | Reactive Charges 21-22 |
| **47** | Reactive Energy Charge | 5.33816 | 09.12.21 | | Interest Amount received in Reactive Account |
| **48** | Addl. Dev | 489.56759 | 04.01.22 | | DSM Charges of 20-21 received from Jharkhand |
| **49** | Reactive Energy Charge | 449.70232 | 04.01.22 | | Reactive Charges 21-22 |
| **50** | Reactive Energy Charge | 547.40910 | 04.02.22 | | Reactive Charges 21-22 |
| **51** | Addl. Dev | 7182.00679 | 08.02.22 | | Excess amount after clearing Wk-43 |
| **52** | Addl. Dev | 103.38490 | 28.02.22 | | DSM Charges of 20-21 received from Jharkhand and POSOCO CC (REC) |
| **53** | Reactive Energy Charge | 22.28702 | 04.03.22 | | Reactive Charges 21-22 |
| **54** | Reactive Energy Charge | 978.22379 | 08.03.22 | | Reactive Charges 21-22 |
| **55** | Reactive Energy Charge | 502.63132 | 04.04.22 | | Reactive Charges 21-22 |
| **56** | Addl. Dev | 13586.90110 | 02.05.22 | | Addl Dev Charge 21-22 |
| **57** | Reactive Energy Charge | 91.67842 | 02.05.22 | | Reactive Charges 21-22 |
| **58** | Addl. Dev | 323.72543 | 17.05.22 | | DSM Charges of 21-22 received from Jharkhand |
| **59** | Addl. Dev | 223.19034 | 31.05.22 | | DSM Charges of 21-22 received from Jharkhand |
| **60** | Addl. Dev | 17070.55890 | 02.06.22 | | DSM charges |
| **61** | Reactive Energy Charge | 104.77973 | 02.06.22 | | Reactive Charges 21-22 |
| **62** | Addl. Dev | 700.00000 | 10.06.22 | | DSM Charges of 21-22 received from Jharkhand and DVC (Bhutan) |
| **63** | Addl. Dev | 230.65522 | 24.06.22 | | DSM Charges of 21-22 received from Jharkhand and DVC (Bhutan) |
| **64** | Addl. Dev | 200.00000 | 28.06.22 | | DSM Charges of 21-22 received from Jharkhand |
| **65** | Addl. Dev | 200.00000 | 01.07.22 | | DSM Charges of 21-22 received from Jharkhand |
| **66** | Reactive Energy Charge | 491.14301 | 08.07.22 | | Reactive Charges 21-22 received from Bihar |
| **67** | Addl. Dev | 200.00000 | 14.07.22 | | DSM Charges of 21-22 received from Jharkhand |
| **68** | Addl. Dev | 900.00000 | 20.07.22 | | DSM Charges of 21-22 received from Sikkim and Bihar |
| **69** | Addl. Dev | 300.00000 | 25.07.22 | | DSM Charges of 21-22 received from Jharkhand |
| **70** | Addl. Dev | 200.00000 | 26.07.22 | | DSM Charges of 21-22 received from Jharkhand |
| **71** | Addl. Dev | 400.00000 | 28.07.22 | | DSM Charges of 21-22 received from Jharkhand |
| **72** | Addl. Dev | 553.96908 | 08.08.22 | | DSM Charges of 21-22 received from Bihar |
| **73** | Reactive Energy Charge | 56.45017 | 08.08.22 | | Reactive Charges 22-23 |
| **74** | Reactive Energy Charge | 586.61896 | 07.09.22 | | Reactive Charges 22-23 |
| **75** | Reactive Energy Charge | 152.77578 | 07.10.22 | | Reactive Charges 22-23 |
| **76** | Addl. Dev | 15507.63580 | 07.11.22 | | DSM Charges 22-23 |
| **77** | Reactive Energy Charge | 94.63234 | 07.11.22 | | Reactive Charges 22-23 |
| **78** | Reactive Energy Charge | 89.18883 | 02.12.22 | | Reactive Charges 22-23 |
| **79** | Reactive Energy Charge | 162.52773 | 05.01.23 | | Reactive Charges 22-23 |
| **80** | Reactive Energy Charge | 3.93158 | 07.02.23 | | Reactive Charges 22-23 |
| **81** | Reactive Energy Charge | 292.70498 | 06.03.23 | | Reactive Charges 22-23 |
| **82** | Reactive Energy Charge | 321.80291 | 30.03.23 | | Reactive Charges 22-23 |
| **83** | Addl. Dev | 10079.39783 | 06.04.23 | | DSM Charges 22-23 |
| **84** | Reactive Energy Charge | 716.65397 | 04.05.23 | | Reactive Charges 23-24 |
| **85** | Reactive Energy Charge | 508.35350 | 07.06.23 | | Reactive Charges 23-24 |
| **86** | Reactive Energy Charge | 83.11163 | 05.07.23 | | Reactive Charges 23-24 |
| **87** | Reactive Energy Charge | 498.36959 | 04.08.23 | | Reactive Charges 23-24 |
| **88** | Reactive Energy Charge | 50.77966 | 05.09.23 | | Reactive Charges 23-24 |
| **89** | Reactive Energy Charge | 5.26035 | 06.10.23 | | Reactive Charges 23-24 |
| **90** | Reactive Energy Charge | 6.79669 | 06.11.23 | | Reactive Charges 23-24 |
| **91** | Reactive Energy Charge | 0.11306 | 05.12.23 | | Reactive Charges 23-24 |
| | | | | | |
| | **Total** | **218731.92988** | | | |

**DSM account Reconciliation Status of ER constituents**

**Annexure-VI**

| | 2019-20 | | | | 2020-21 | | | | 2021-22 | | | | 2022-23 | | | | 2023-24 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Name of The Utility** | **Q1 (17.07.19)** | **Q2 (21.10.19)** | **Q3 (13.01.20)** | **Q4 (15.04.20)** | **Q1 (15.07.20)** | **Q2 (23.10.20)** | **Q3 (20.01.21)** | **Q4 (28.04.21)** | **Q1 (06.07.21)** | **Q2 (07.10.21)** | **Q3 (11.01.22)** | **Q4 (18.04.22)** | **Q1 (15.07.22)** | **Q2 (21.10.22)** | **Q3 (19.01.23)** | **Q4 (28.04.23)** | **Q1 (28.07.23)** | **Q2 (19.10.23)** | | |
| BSPHCL | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | NO | NO | NO | | |
| JUVNL | YES | YES | YES | YES | YES | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | | |
| DVC | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | NO | NO | NO | NO | NO | NO | | |
| GRIDCO | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | | |
| WBSETCL | YES | YES | YES | YES | YES | NO | NO | YES | YES | NO | NO | NO | NO | NO | NO | NO | NO | NO | | |
| SIKKIM | YES | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | | |
| NTPC | YES | YES | YES | YES | YES | YES | YES | YES | Yes | YES | YES | YES | YES | YES | YES | YES | YES | YES | | |
| NHPC | YES | YES | YES | YES | YES | YES | YES | NO | YES | YES | YES | YES | YES | YES | YES | NO | NO | NO | | |
| MPL | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | NO | NO | YES | YES | YES | | |
| APNRL | YES | YES | YES | YES | YES | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | | |
| CHUZACHEN(GATI) | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | | |
| NVVN(Ind-Bng) | YES | YES | YES | YES | YES | NO | NO | NO | YES | YES | YES | YES | YES | YES | YES | NO | YES | YES | | |
| NVVN(Ind-Nep) | YES | YES | YES | YES | YES | NO | NO | NO | YES | YES | YES | YES | YES | YES | YES | NO | YES | YES | | |
| GMR | YES | YES | YES | YES | NO | NO | NO | YES | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | | |
| JITPL | YES | YES | YES | YES | YES | YES | YES | NO | NO | NO | NO | YES | NO | NO | YES | NO | NO | NO | | |
| TPTCL (DAGACHU) | YES | YES | YES | YES | YES | NO | NO | NO | YES | YES | YES | YES | NO | NO | NO | YES | NO | NO | | |
| JLHEP(DANS ENERGY) | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | NO | NO | YES | YES | YES | YES | | |
| BRBCL | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | NO | YES | YES | | |
| POWERGRID (ER-I) | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | NO | NO | | |
| POWERGRID (ER-II) | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | | |
| TUL (TEESTA-III) | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | NO | YES | YES | YES | NO | NO | | |
| DIKCHU | YES | YES | YES | YES | YES | NO | NO | NO | NO | NO | NO | NO | YES | NO | NO | YES | YES | NO | | |
| SHIGA (TASHIDING) | YES | YES | YES | YES | YES | NO | NO | YES | YES | YES | YES | YES | NO | NO | YES | YES | YES | YES | | |
| Rongnichu | NA | | | | NA | | | | NA | | YES | NO | NO | NO | NO | YES | NO | NO | | |

(1)The dates in the bracket indicates the date of sending the Reconciliation statements by ERLDC to utilities.
(2) YES Indicates that signed reconciliation statement received by ERLDC
(3) NO Indicates that signed reconciliation statement is not received by ERLDC

# Reactive Account Reconciliation Status

Annexure-VII

| | 2019-20 | | | | 2020-21 | | | | 2021-22 | | | | 2022-23 | | | | 2023-24 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Reactive account Reconciliation Status of ER constituents | | | | | | | | | | | | | | | | | | | | |
| Name of The Utility | Q1 (17.07.19) | Q2 (21.10.19) | Q3 (13.01.20) | Q4 (15.04.20) | Q1 (15.07.20) | Q2 (23.10.20) | Q3 (20.01.21) | Q4 (28.04.21) | Q1 (06.07.21) | Q2 (07.10.21) | Q3 (11.01.22) | Q4 (18.04.22) | Q1 (15.07.22) | Q2 (21.10.22) | Q3 (19.01.23) | Q4 (28.04.23) | Q1 (28.07.23) | Q2 (19.10.23) | | |
| BSPHCL | YES | NA | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | NO | NO | NO | | |
| JUVNL | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | | |
| DVC | YES | N/A | N/A | N/A | YES | NO | NO | YES | YES | YES | YES | YES | NO | NO | NO | NO | NO | NO | | |
| GRIDCO | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | NO | YES | YES | YES | | |
| WBSETCL | YES | YES | NO | NO | YES | NO | NO | YES | YES | NO | NO | NO | NO | NO | NO | NO | NO | NO | | |
| SIKKIM | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | | |
| NVVN(Ind-Bng) | | | | | | | | | | | | | | | | | YES | YES | | |
| NVVN(Ind-Nep) | | | | | | | | | | | | | | | | | YES | YES | | |

# TRAS Account Reconciliation Status

| | 2023-24 | | | |
|---|---|---|---|---|
| TRAS account Reconciliation Status | | | | |
| Name of The Utility | Q1 (28.07.23) | Q2 (19.10.23) | | |
| NTPC | YES | YES | | |
| BRBCL | YES | YES | | |
| MPL | YES | YES | | |

# SRAS Account Reconciliation Status

| | 2022-23 | | 2023-24 | | | |
|---|---|---|---|---|---|---|
| Name of The Utility | Q3 (19.01.23) | Q4 (28.04.23) | Q1 (28.07.23) | Q2 (19.10.23) | | |
| NTPC | YES | YES | YES | YES | | |
| MPL | YES | YES | YES | YES | | |
| NHPC | YES | NO | NO | NO | | |
| | | | | | | |

Annexure-VIII

## Reconciliation Between Open Access department of ERLDC and SLDCs, STUs and CTU

| Sl. No. | STUs / SLDCs Name | Quarter-I (2022-23) | Quarter-II (2022-23) | Quarter-III (2022-23) | Quarter-IV (2022-23) | Quarter-I (2023-24) | Quarter-II (2023-24) |
|---|---|---|---|---|---|---|---|
| | Date of Issuance | 28-07-2022 | 26-10-2022 | 30-01-2023 | 18-04-2023 | 21-07-2023 | 27-10-2023 |
| 1 | West Bengal - SLDC and STU | NO | NO | NO | NO | NO | NO |
| 2 | DVC - SLDC | NO | NO | YES | YES | NO | NO |
| 3 | OPTCL-SLDC and STU | YES | YES | YES | YES | YES | NO |
| 4 | Jharkhand STU and SLDC | NO | NO | NO | NO | NO | NO |
| 5 | Bihar-SLDC and STU | YES | NO | NO | NO | NO | NO |
| 6 | Andhra Pradesh | NO | NO | NO | NO | NO | NO |
| 7 | CHHATTISGARH | NO | NO | NO | NA | NO | NO |
| 8 | Delhi | NO | NO | NO | NA | NO | NO |
| 9 | HIMACHAL PRADESH | NO | NO | NO | NO | NO | NO |
| 10 | JAMMU & KASHMIR | NO | NA | NA | NA | NA | NO |
| 11 | KARNATAKA | NO | NO | NO | NO | NO | NO |
| 12 | MADHYA PRADESH | NO | NO | NO | NO | NO | NO |
| 13 | MAHARASTRA | NO | NO | NO | NO | NO | NO |
| 14 | Manipur | NA | NA | NA | NA | NO | NO |
| 15 | RAJASTHAN | NO | NO | NO | NO | YES | YES |
| 16 | Gujarat | NA | NO | NO | NA | NO | NO |
| 17 | Uttar Pradesh | NA | NO | NO | NO | NO | NO |
| 18 | Tamil Nadu | NA | NA | NA | NA | NO | NO |
| 19 | Telangana | NA | NA | NO | NO | NA | NA |
| 20 | CTU | NO | NO | NO | NO | NO | NO |

## Reconciliation Between Open Access department of ERLDC and Applicants

| Sl. No. | Applicants Name | Quarter-I (2022-23) | Quarter-II (2022-23) | Quarter-III (2022-23) | Quarter-IV (2022-23) | Quarter-I (2023-24) | Quarter-II (2023-24) |
|---|---|---|---|---|---|---|---|
| | Date of Issuance | 28-07-2022 | 26-10-2022 | 30-01-2023 | 18-04-2023 | 21-07-2023 | 27-10-2023 |
| 1 | Bihar State Power Holding Company Limited | NA | NA | NA | NA | NA | NA |
| 2 | Calcutta Electric Supply Company | NA | NA | NA | NA | NA | NA |
| 3 | GRIDCO Ltd | YES | YES | NA | NA | YES | NO |
| 4 | GMR Energy Trading Limited | NA | NA | NA | NA | NA | YES |
| 5 | Jindal India Thermal Power Limited | NO | NO | NO | NO | NO | NO |
| 6 | Jharkhand Bijli Vitaran Nigam Limited | NO | NO | NO | NO | NO | NO |
| 7 | NHPC Limited | NA | NA | NA | NA | NA | NA |
| 8 | West Bengal State Electricity Distribution Company Limited | NO | NO | NA | NA | NO | NO |
| 9 | Adani Enterprises Limited | NA | NA | NA | NA | NO | NA |
| 10 | ADANI HYBRID ENERGY JAISALMER THREE LIMITED AHS | YES | YES | NA | NA | NA | NA |
| 11 | ADANI HYBRID ENERGY JAISALMER THREE LIMITED AHW | YES | YES | NA | NA | NA | NA |
| 12 | Arunachal Pradesh Power Corporation Private Limited | NO | NO | NO | NO | NO | NO |
| 13 | Clean Solar Power (Jodhpur) Private Limited | YES | YES | YES | NA | NA | NA |
| 14 | DALMIA CEMENT (BHARAT) LIMITED (RCW) | NA | NA | NA | NO | NO | NO |
| 15 | HINDUSTAN POWER EXCHANGE LIMITED | NA | YES | YES | YES | YES | YES |
| 16 | INDIAN ENERGY EXCHANGE LIMITED | NO | NO | NO | YES | YES | NO |
| 17 | India Power Corporation Limited | NO | NO | NO | NO | NO | NO |
| 18 | ITC Limited Dairy Plant | NO | NO | NA | NA | NO | NO |
| 19 | ITC Limited ITD Munger | YES | YES | NA | NA | NO | NO |
| 20 | ITC LTD Kidderpore | NO | NO | NO | NA | NA | NA |
| 21 | I T C LIMITED, Sonar and Royal Bengal | NA | NO | NA | NA | NA | NA |
| 22 | ITC Limited Corporate Office Kolkatta | NA | NA | NA | NA | NA | NO |
| 23 | KREATE ENERGY(I) PRIVATE LIMITED | NO | NO | NO | NO | NO | NO |
| 24 | NATIONAL ALUMINIUM COMPANY LIMITED AP | NA | NA | NA | NO | NO | NO |
| 25 | NATIONAL ALUMINIUM COMPANY LIMITED-OD | NA | NA | NA | NO | NA | NO |
| 26 | NTPC VIDYUT VYAPAR NIGAM LIMITED | YES | NA | NA | NA | NO | NA |
| 27 | POWER EXCHANGE INDIA LIMITED | NO | YES | YES | YES | YES | YES |
| 28 | PTC INDIA LIMITED | YES | YES | NO | NA | NA | NA |
| 29 | TATA POWER TRADING COMPANY LIMITED | NO | NO | NO | NO | NO | NO |
| 30 | TATA STEEL LIMITED @132kV | NO | NA | NA | NA | YES | NO |
| 31 | Saranyu Power Trading Private Limited | NA | NO | NA | NO | NA | NA |
| 32 | SHUBHEKSHA ADVISORS PRIVATE LIMITED | NA | NA | NA | NA | NA | NO |
| 33 | OSTRO KANNADA POWER PRIVATE LIMITED | NA | NO | NA | NA | NA | NA |