



सत्यमेव जयते

भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

उत्तर क्षेत्रीय विद्युत समिति

Northern Regional Power Committee

संख्या: NRPC/OPR/107/01/2022/5676-5714

दिनांक: 11.07.2022

विषय: उत्तर क्षेत्रीय विद्युत समिति की संरक्षण उप-समिति की 45^{वीं} बैठक में लिए गए निर्णयों का सार ।

Subject: Gist of decisions taken in the 45th Protection Sub-Committee meeting of NRPC.

उत्तर क्षेत्रीय विद्युत समिति की संरक्षण उप-समिति की 45^{वीं} बैठक 24.06.2022 को आयोजित की गयी। उक्त बैठक लिए गए निर्णयों का सार अनुलग्नक-I में संलग्न है।

45th meeting of the Protection Sub-Committee of NRPC was held on 24.06.2022. The gist of decisions taken in this meeting are enclosed in Annexure-I.

संलग्नक: यथोपरि

(सौमित्र मजूमदार)

अधीक्षण अभियंता (प्रचालन)

सेवा में : संरक्षण उप-समिति के सदस्य (सूची के अनुसार) ।

To: Members of Protection Sub-Committee (As per List)

Gist of decisions taken in the 45th PSC Meeting held on 24.06.2022

1. Agenda No. 1: Confirmation of minutes

1.1 Members confirmed the minutes of 44th Protection sub-committee meeting.

2. Agenda No. 2: Database of protection settings

2.1 Members were apprised that as per decision taken in 43rd PSC meeting, a committee was constituted by NRPC Sectt. vide letter dtd. 06.04.2021 which was reconstituted vide letter dated 27.01.2022 subsequent to the change in the nominations of few members.

2.2 The 1st meeting of the committee was held on 10.02.2022 and 2nd meeting of the committee was held on 14.06.2022. In these meetings, committee has finalized the scope of work. The same was attached in the agenda.

2.3 Members were informed about methodology of data seeding, flow, architecture, access control and basic design of the web-based software.

2.4 Regarding space for server for hosting the software, NRLDC and POWERGRID informed that there are many internal software due to which there is already space constraint at their servers and hosting additional software may not be possible. Accordingly, it was deliberated that option of hosting at NIC cloud may be explored. Other related works may be done through tender.

2.5 NRLDC representative highlighted that involving different agencies may delay the project implementation and hence complete project along with server may be invited in a single tender similar to SRPC.

2.6 SE, NRPC highlighted that method adopted by SRPC has already been explored by NRPC Secretariat in the past and tender was invited on three occasions, but they got cancelled due to lack of competition.

2.7 MS, NRPC mentioned that physical servers need to be maintained as per standard cyber security guidelines which may be difficult considering strength at NRPC. NIC, being a government body may handle security protocols in adequate manner.

2.8 Further, it was agreed that hosting at NIC may be beneficial considering safety and security of the data. It was decided that a meeting with NIC may be scheduled for exploring the possibility and cost estimate considering quantum of data.

2.9 Issue of funding for the project was discussed wherein it was highlighted that there may be CAPEX as well OPEX for the project; however, cost may be significantly lesser compared to earlier tendered project as scope of work has been reduced. It was deliberated that project may be funded from NRPC fund after due approval of NRPC forum.

- 2.10 It was discussed that budgetary quotation/EOI may be requested from suitable vendors. Further, price quotation may be requested from NIC as well. Considering all, estimated cost may be calculated which can be taken up in the NRPC meeting for approval.
- 2.11 POWERGRID requested that data to be uploaded by utilities need to be verified as wrong data will defeat the purpose of this project.
- 2.12 It was decided that one additional layer of check may be included. Utilities may designate approving officer(s) for this purpose. Nodal officer, responsible for uploading data at portal, shall take approval from approving officer(s) within their utility and then upload it on database portal.
- 2.13 Further, issue of deputation of officer from other utilities at NRPC was also discussed. It was discussed that deputation of officers/expert in Protection may be required as many issues may be faced while development of this website. It was decided that long deputation may be difficult; however, officers from NRLDC, POWERGRID, DTL, Delhi SLDC and any other such offices in Delhi NCR may be requested for providing support.

3. Agenda No. 3: Protection Philosophy of NR

- 3.1 Members were apprised that in 42nd PSC meeting, it was decided to constitute expert group, comprising members from NRPC Sectt, NRLDC, POWERGRID, STUs, APL, NTPC, NHPC, RE Generator and other experts such as CBIP, expert from other RPCs, that may study various recommendations related to Protection setting as well as adopted philosophy in other regions/utilities and may further propose an updated protection philosophy in time bound manner.
- 3.2 The status of nomination received for the same was discussed.
- 3.3 POWERGRID was requested to update the nomination in view of transfer of earlier nominated officer.
- 3.4 NRLDC and other utilities were requested to send the nominations at the earliest so that meeting of the committee can be held.
- 3.5 It was also decided that Adani and NTPC may be requested for nominating renewal generation related protection experts.

4. Agenda No. 4: Reviewing the Time Delay setting for Special Protection Scheme (SPS) installed at 400 kV S/S Deepalpur (Agenda by HVPNL)

- 4.1 HVPNL apprised the issue faced by them due to time delay setting for Special Protection Scheme (SPS) installed at 400 kV S/S Deepalpur and requested that these setting may be reviewed as SPS is getting operated in case of line fault.
- 4.2 After deliberation, it was suggested that time delay may be set as 1500 msec for case-3 of SPS considering fault in zone – 3 and operation of auto reclosure. It was also mentioned that similar time delay is being used in UP and POWERGRID.

4.3 NRLDC stated that they will internally discuss the setting and will confirm by e-mail to Haryana.

5. Agenda No. 5: Proposal to implement additional protection in 220KV lines emanating from NAPS (Agenda by NAPS)

5.1 NAPS informed that on 11.08.2021 at 13:25 hrs, both units (NAPS-1 and NAPS-2) had tripped subsequent to isolation of NAPS switchyard from grid due to fault caused by R-phase CVT of 220kV Line-1 (Narora-Sambhal). The matter was discussed with designer, NPCIL, Mumbai and additional protection for the 220kV lines has been suggested which was presented by NAPS in the meeting.

5.2 The issue was deliberated at length wherein NRLDC, UPSLDC, POWERGRID highlighted that these settings need to be analyzed technically in depth before any decision. Accordingly, it was decided that a committee may be constituted comprising members from NAPS, NRLDC, NRPC Sectt., POWERGRID and UPSLDC to look into the issue and submit its recommendation at the earliest.