NEPAL ELECTRICITY AUTHORITY

A YEAR IN REVIEW-FISCAL YEAR-2024/2025

AUGUST-2025 (BHADRA-2082)

DURBAR MARG, KATHMANDU, NEPAL

MOU Signing Ceremony with Power Grid India Limited

Sanjen and Chilime HEP Site

Contents

Front Cover: Chilime -Trishuli 220 kV TL
Back Cover up: Khudi 220/132 kV Substation
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Hon'ble Dipak Khadka
Minister
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Government of Nepal
Ministry of Energy, Water Resources & Irrigation

Letter No.
Ref. No.

Message from the Minister

On the momentous occasion of the 40th Anniversary of the Nepal Electricity Authority (NEA), I extend my heartfelt congratulations and best wishes to the entire NEA family, our valued consumers and all stakeholders who have been part of this remarkable journey. Over the last four decades, NEA has evolved into the backbone of Nepal's electricity sector - delivering power to homes, industries and communities, and in doing so, powering the dreams and aspirations of our nation.

Since its establishment in 2041 B.S., NEA has led a remarkable transformation in our energy landscape. We have progressed from chronic shortages to seasonal energy surplus and from reliance on imports to becoming a net exporter of electricity. Nepal's current electricity export capacity to India stands at around 1,000 MW, with agreements in place to increase this further in the coming days. We have also begun exporting 40 MW to Bangladesh – an historic step toward expanding regional energy trade, with plans for further growth in the years ahead. Today, with national electrification reaching nearly 98% of our population, the light of progress shines brighter than ever, driving socio-economic transformation and enhancing the quality of life across the country.

The Government of Nepal has set an ambitious and forward-looking Energy Development Roadmap 2081, which envisions generating 28,500 MW by 2035, achieving 100% energy access and exporting up to 15,000 MW to our neighboring countries. NEA's contributions through expansion of generation capacity, modernization of transmission and distribution systems, integration of renewable energy, promotion of e-mobility and strengthening of cross-border power trade are central to turning this vision into reality. I am particularly encouraged by NEA's initiatives in building strategic transmission infrastructure, diversifying the energy mix with large-scale solar projects, expanding electric vehicle charging networks and promoting private sector participation in generation, transmission and distribution. These steps not only strengthen domestic energy security but also position Nepal as a clean energy leader in the South Asian region.

As we celebrate this milestone, we must also remain mindful of the challenges ahead: the need to match rapidly increasing generation capacity with robust transmission and distribution networks; securing

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sustained investments; ensuring system reliability and resilience against natural disasters and maximizing regional energy trade opportunities. Addressing these challenges will require innovation, strong governance and coordinated efforts between government, NEA, private sector and development partners.

On behalf of the Government of Nepal, I commend NEA for its financial and technical achievements, its efficiency in service delivery, and its invaluable role in elevating Nepal's stature in the regional energy market. I am committed to ensuring that the benefits of our hydropower resources reach the poor, marginalized and underprivileged - uplifting lives, strengthening communities and ensuring that our nation's natural wealth is harnessed wisely for the benefit of all.

Finally, I wish NEA continued success in the years to come and reaffirm the Government's unwavering support in its journey ahead.

Dipak Khadka
Minister
Ministry of Energy, Water Resources and Irrigation

Hon'ble Kham Bahadur Garbuja
State Minister
Ministry of Energy, Water Resources & Irrigation

Government of Nepal
Ministry of Energy, Water Resources & Irrigation

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Message from the State Minister

Distinguished leadership of the Nepal Electricity Authority, dedicated employees, and esteemed citizens,

I am honored to congratulate the entire NEA family on the occasion of its 40th anniversary. For four decades, the NEA has been a beacon of progress, illuminating our nation and powering its development.

The NEA has been the driving force behind our energy sector, from building our national power grid to harnessing our vast hydropower potential. Your achievements are a testament to your hard work and dedication. The end of chronic load shedding was a historic feat, bringing prosperity to countless homes and businesses. I am delighted to note that electricity now reaches nearly every household, and the reduction in system losses is a model of efficiency for all public institutions. Furthermore, the NEA's embrace of modern technology, including smart meters and GIS mapping, shows your commitment to a modern future.

A truly historic achievement we celebrate today is the successful commencement of the third-country electricity trade with Bangladesh. This trilateral agreement is a momentous and impactful development that strengthens regional cooperation and opens a new chapter for Nepal in the global energy market.

Looking ahead, we must address the challenges of frequent power tripping, and strengthen our distribution and transmission systems to ensure a reliable supply for all. It is also crucial to accelerate the completion of large-scale hydropower projects, prioritizing those that can manage seasonal energy imbalances. I urge the NEA to incorporate climate resilience into all future infrastructure to address the growing threat of climate change.

These successes are a direct result of the tireless efforts and dedication of every employee. I extend my deepest gratitude for your invaluable contributions. The Government of Nepal is fully committed to supporting NEA in its mission. I assure you of our unwavering support as you work to meet the nation's growing electricity demand and fulfill our shared vision of a prosperous, energy-rich Nepal.

Congratulations once again on this auspicious occasion.

With warm regards,

Hon. Kham Bahadur Garbuja
State Minister
Ministry of Energy, Water Resources and Irrigation

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Kham Bahadur Garbuja
State Minister
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Message from the Secretary

On this auspicious occasion of the 40th Anniversary of the Nepal Electricity Authority (NEA), I would like to extend my heartfelt congratulations and best wishes to the entire NEA family and electricity consumers. The progress made in Nepal's electricity sector over the past decades has been truly remarkable. Connecting nearly 98% of the population through electrification and making energy sales of 17 billion rupees from power trade to India in fiscal year 2081/82 also stands as a historic milestone, reflecting the dedication and hard work of all personnel involved. This achievement has not only brightened homes and communities but has also illuminated the path towards socio-economic upliftment across the nation.

NEA has been extending its electricity supply to around 6.18 million households in 77 districts of Nepal through 6,760 circuit km high voltage transmission line, 2,18,067 circuit km distribution line and 14,123 MVA substations. Moreover, it has been successful in constructing and operating EV charging stations, expanding renewable energy integration, upgrading transmission and distribution networks, reducing system losses and modernizing grid infrastructure to ensure a more reliable, efficient and sustainable power system. This milestone is a testament of unwavering dedication, tireless efforts, and commitment of NEA to the nation's electricity development.

From its inception in 2041 B.S, NEA has made remarkable strides in the field of electrification through generation, transmission, and distribution of electricity across the country. From a time when large parts of Nepal remained in darkness, to now achieving seasonal energy surplus and even exporting electricity to neighboring countries. At this juncture, the entire journey has been inspiring, not only challenging. As a matter of fact, the established power sector has played a vital role in improving the quality of life of our citizens, enabling economic growth, industrial development, and greater social inclusion. As we look ahead, our focus must now be shifted towards ensuring the reliability, safety, and sustainability of our electricity supply systems. A reliable and robust power system is essential for gaining public confidence and power trade off that envisioned a support for long term national development.

According to the Energy Development Roadmap 2081, Nepal has set an ambitious yet achievable target of generating 28,500 MW of electricity, making 100% energy access, and exporting up to 15,000 MW to neighboring countries. With the continuous rise in electricity generation leading to growing demand for transmission infrastructure, it has become essential to create an enabling environment for private sector investment in transmission infrastructure and to strengthen the efficiency of electricity trade-both domestically and for export. In light of these developments, the NEA must also realign its strategic objectives through sustained and comprehensive institutional reform.

Looking ahead to a brighter and energy-secured future, I am confident that NEA will continue to adapt with strategic requirement and committed to generating, transmitting, and distributing electricity that is efficient, reliable, and affordable energy for all citizens across the nation. At last, I would like to congratulate the entire NEA family for their continued efforts and commitments to place NEA as a financially and technically sound public enterprise.

Suresh Acharya
Secretary
Ministry of Energy, Water Resources and Irrigation

Board of Directors

Mr. Dipak Khadka
Hon'ble Minister
Ministry of Energy, Water Resources and Irrigation
Chairman

Mr. Suresh Acharya
Secretary, Ministry of Energy,
Water Resources and Irrigation
Member

Mr. Dinesh Kumar Ghimire
Secretary, (Revenue) Ministry of Finance
Member

Mr. Ratan Bahadur Ayer
Prominent Person in Power Sector
Member

Dr. Bal Bahadur Parajuli
Prominent Person in Power Sector
Member

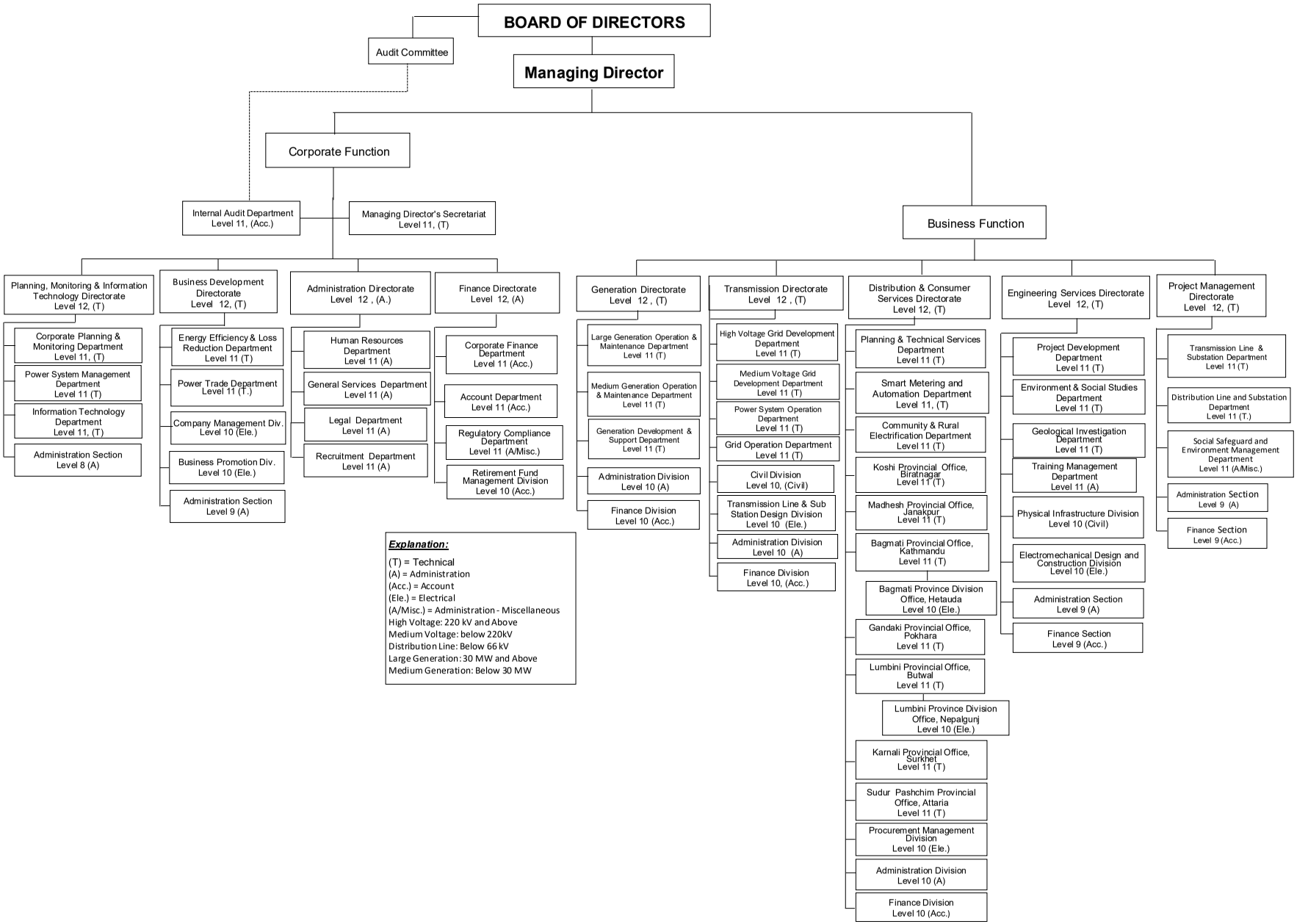
Mr. Shyam Kishor Yadav
Member from Consumer Group

Mr. Rohit Poudel
Prominent Person in Commerce,
Industry and Financial Sector
Member

Mr. Hitendra Dev Shakya
Managing Director, NEA
Member Secretary

NEPAL ELECTRICITY AUTHORITY

Organization Structure



Deputy Managing Directors

Mr. Dirghayu Kumar Shrestha
Deputy Managing Director
Distribution & Consumer Service Directorate

Mr. Tularam Giri
Deputy Managing Director
Administration Directorate

Mr. Madan Timsina
Deputy Managing Director
Generation Directorate

Mr. Tara Prasad Pradhan
Deputy Managing Director
Project Management Directorate

Mr. Fanendra Raj Joshi
Deputy Managing Director
Engineering Services Directorate

Mr. Durga Nanda Bariyait
Deputy Managing Director
Planning, Monitoring and IT Directorate

Mr. Subash Kumar Mishra
Deputy Managing Director
Business Development Directorate

Mr. Mohan Prasad Gautam
Deputy Managing Director
Deputed to Upper Tamakoshi Hydropower Ltd.

Mr. Rajan Rishi Kadel
Acting Deputy Managing Director
Finance Directorate

Mr. Rajan Dhakal
Acting Deputy Managing Director
Transmission Directorate

MANAGING DIRECTOR'S REPORT

It is with immense pride and gratitude that I present the Nepal Electricity Authority's (NEA) Annual Report for the Fiscal Year 2024/2025, marking the 40th anniversary of NEA's establishment under the NEA Act of 2041 (1984). Over the past four decades, NEA has grown into a cornerstone of Nepal's energy sector, driven by its mandate to ensure accessible, reliable, and affordable electricity through generation, transmission, and distribution across the nation. This milestone year offers an opportunity to reflect on our achievements, address ongoing challenges, and reaffirm our commitment to powering Nepal's progress.

After the successful eradication of dreadful load-shedding, NEA is now focused on enhancing the reliability and quality of power supply as well as improving the customer care. NEA is also committed in assisting the Government of Nepal to attain its energy development targets and transforming the electricity sector for shared prosperity of the country. For this, NEA is actively engaged in developing electricity infrastructures like strategic high voltage transmission line and substations, large storage and peaking hydropower projects as well as reinforcing the present distribution networks and constructing new distribution lines for ensuring full electrification throughout the country. NEA equally prioritizes the private sector participation in the sector for the shared collaboration in energy sector development. In addition, NEA has been increasing the use of modern technology like use of IT with digitization of NEA itself to ensure the accountability, transparency and efficiency in its internal procedures and offering its customers the top-notch service.

At the end of year in review (FY 2024/25), the total installed generation capacity reached 3,591 MW with 434 MW added in this reporting year only. In addition, more than 200 MW are in pipeline in the system within couple of months. The recorded total system peak demand for the year was 2,901 MW and national peak demand was 2,409 MW. NEA continued to be net-exporter of electricity with record-high net exports of 699 GWh of electricity amounting to NRs. 4.5 billion of the net income from the cross-border electricity trade in year 2024/25. The total system loss was reduced to 12.26% from last year's loss of 12.73% despite increased usage of the wires and equipment arising from a net internal consumption increase of 10.74%. Financially, NEA was able to increase its revenue from electricity sales to NRs. 125.28 billion, 8.46%, increase from previous year. NEA is expected to make a profit of NRs. 9.07 billion (before tax) in this reporting year. The total asset reached NRs. 683.9 billion with total work in progress of NRs. 257.3 billion.

Though the year in review marked a significant achievement, NEA is assumed to face multitude of challenges in coming years. As more hydropower projects will commence their operation in coming days, it is very challenging to utilize their full capacity. For this purpose, it is essential to increase both the domestic consumption and volume of electricity export so that energy production curtailment may be avoided. Furthermore, massive investment is required in the transmission and distribution capacity to reinforce the existing networks to accommodate the future increase in generation, transmission and distribution as well as to improve the reliability of the system. Likewise, for the potential import and export accelerated expansion of cross border transmission line and interconnection facilities is essential. The scale of

investments required to meet these challenges far exceeds the NEA's operating cash surplus. Thus, NEA is venturing out to seek innovative solutions.

Moreover, the natural disasters like earthquake, landslides, floods etc. are also posing threats to power infrastructures of Nepal on regular basis. For instance, the recent flood at Bhotekoshi River severely damaged Trishuli 3A and Rasuwagadhi headworks as well as Trishuli 3B Hub substation.

As we stand at the crossroads of opportunity and challenge, NEA proudly celebrates its 40th anniversary. On this auspicious occasion, I extend my heartfelt gratitude to our stakeholders—partners, employees, and the people of Nepal—for your unwavering support over the past four decades. Your trust has been the cornerstone of our journey, and I humbly request your continued partnership for shaping brighter future together. On behalf of NEA, I reaffirm our unwavering commitment in elevating the energy sector's development to new level with delivering reliable, high-quality services to our valued customers.

Despite NEA's strong emphasis on safety, we regretfully report incidents of injuries and fatalities due to electrical accidents. On behalf of NEA, I pay tribute to those who lost their lives and pledge enhanced vigilance and awareness to minimize future accidents.

This Annual Report for FY 2024/2025 presents the progress across generation, transmission, and distribution, as detailed and in respective sections below.

Operational Performance

In FY 2024/25, the number of electricity consumers of NEA grew to 5.71 million, a 4.6% increase from FY 2023/24, excluding approximately 0.33 million consumers served by Community Rural Electrification. Out of total number of consumers, domestic consumers accounted for 91.08% while industrial and other consumers represented 1.23% and 7.69%, respectively. The national grid coverage reached 97.6% with 18 local level yet to have access to national grid. The per capita electricity consumption increased to 465 kWh from the previous year's 400 kWh.

Out of the total available energy of 15,641 GWh in FY 2024/25, NEA and its subsidiaries contributed 34% whereas the IPPs supplied 55% and 11% was imported from India. The total domestic consumption in the year was 11,343 GWh (including internal consumption), an increase of 10.74% from the previous year. Domestic consumers share the largest consumption with 42.3% followed by the industrial sector which consumed 36.5% of the total domestic consumption.

The electricity exports to India rose to 2,380 GWh which is 22.3% more than that of the previous year resulting in the net export of 699 GWh. NEA recorded 2,901 MW of system peak demand on 1st July 2025 out of which 2,214 MW was internally consumed, and 687 MW was exported to India. The national peak demand was recorded to be 2,409 MW on 10th June 2025.

Further, in order to establish the indicators of efficiency and reliability in operations, NEA has established distribution system reliability indices – System Average Interruption Frequency Index (SAIFI) and System Average Interruption Duration Index (SAIDI). The SAIFI and SAIDI of NEA's distribution system for this year evaluated based on the data from the installed 55,100 smart meters are found to be 1,190.24 times per consumer and 595.40 hours in the total duration of outage per consumer.

Financial Performance

NEA earned net profit of NRs. 9,067 million before tax in FY 2024/25. The reduction in net profit this year has been largely contributed by the loss incurred due to forex rate increase in the currencies of NEA's loan, the increased provisioning for unrealistic receivables as well as the administrative cost increase incurred due to hand-over of rural entities. Gross revenue from energy sales reached NRs 125,277 million, including NRs 17,471 million from power exports, increase of 8.46% from FY 2023/24.

Operating expenses, including power purchases, increased 10.15% to NRs 97,787 million from NRs 88,778 million, with power purchase costs alone rising 11.73% to NRs 77,101 million from NRs 69,007 million from previous year. Other operating expenses for generation, transmission, distribution, royalties and power service export charge were NRs 2,075 million, NRs 3,242 million, NRs 12,228 million, NRs 1,849 million, and NRs 1292 million respectively. Interest expenses grew 11% to NRs 7,173 million from NRs 6,462 million, while depreciation and amortization expenses increased to NRs 9,485 million from NRs 9,143 million from the previous year. Foreign exchange losses in FY 2024/25 were NRs 2,252 million. Capital Works in Progress (CWIP)

reached NRs 257,312 million, with a net addition of NRs 36,457 million. The total assets of NEA increased by 6.2% from the previous year and reached NRs. 684,913 million in FY 2024/25. The Retirement Fund balance stood at NRs 8.959 million, with NRs 1,641 million provided as loans to contributors.

The average collection period (ACP) was recorded as 45.84 days excluding the government subsidy, streetlight dues and dedicated/trunk line dues. NEA has made significant contribution with implementing the government's streetlight subsidy policy, NEA has provided free energy of 176,711,018 kWh to approximately 2,073,514 numbers of domestic consumers having the connection of capacity 5 Amp. Further, the average selling price was calculated as NRs. 9.44/kWh. The average sales per consumer increased from 1,873 kWh to 1,978 kWh and the collection from online payment increased to NRs. 34.33 billion from NRs. 27.44 billion.

Expansion of Energy Infrastructure and Modernization of NEA

In the generation sector, NEA, through its subsidiaries, completed Rasuwagadhi Hydropower Project with installed capacity 111 MW and Sanjen (Upper) 14.8 MW and Sanjen 42.5 MW. Madhya Bhotekoshi HEP 102 MW is ready for operation. Rahughat 40 MW is heading towards completion within the year of 2025 and Tanahu 140 MW has already crossed halfway in construction. Likewise, Trisuli 3B 37 MW, Rolwaling 22MW, Tamakoshi V 99.8 MW and Upper Modi 60 MW are already in different stages of the construction.

Further in FY 2024/25, NEA, aiming to diversify its generation mix, has awarded the bids to develop 960 MW of solar plants in different parts of the country through a competitive tariff-based competitive bidding process.

On the transmission side, NEA, in FY 2024/25 completed much awaited Chilime-Trishuli 220 kV Transmission Line enabling evacuation of power generated in Trishuli river basin. Furthermore, the successful commissioning of New-Butwal – Bardaghat 220 kV Transmission Line (both circuits) helped in further extending the 220 kV network in the west. Similarly, completion of Dhungesanghu-Basantapur 220 kV Transmission Line allows the power evacuation of hydropower projects being constructed in Arun and Tamor river basins. NEA completed the much awaited New Khimti – Barhabise 400 kV transmission line which will be utilized to transmit the power generated from various river basins in Sindhupalchowk district.

In FY 2024/25 NEA also completed the construction of Dhalkebar-Loharpatii 132 kV Transmission Line, 220/132 kV GIS substations at Markichowk and Barhabise, 132/11 kV Prasauni substation, 132/11 kV Loharpatti substation, 132/11 kV Mulpani substation, 132/66/11 kV Amlekhgunj SS and expansion of 132/33 kV Malekhu substation.

At the end of the FY 2024/2025 the high voltage transmission line length reached 6,760 circuit kilometers (ckt-kms) from 6,508 ckt-kms previous year. The total substation capacity grew to 14,123 MVA with 1,073 MVA added in year 2024/25 only. Furthermore, 2,034 ckt-kms of high voltage transmission lines and 6,338 MVA capacity substations are at various stages of construction. NEA is implementing Substation Automation System (SAS) in existing 52 grid substations across the country which is expected to complete in FY 2025/26.

Likewise on the distribution side, in FY 2024/2025, NEA added 15 new 33/11 kV substations of total capacity 140 MVA, 9,336 ckt-kms of 33, 11 and 0.4/0.23 kV distribution lines and 3,151 numbers of 11/0.4 kV transformers with total capacity of 338 MVA into its distribution system. NEA is also expanding distribution lines in the remote places of the country to ensure that no households are deprived of electricity access. Similarly, underground cabling works are ongoing in major cities including Kathmandu, Lalitpur, Bhaktapur, Bharatpur and Pokhara to enhance the distribution capacity, safety as well as to enrich the aesthetic beauty of serene cities of Nepal. Works are also being carried out to reinforce the distribution network in Madhesh Province.

NEA has completed the installation of 62 numbers of Electric Vehicle (EV) charging stations in year 2024/25 at various locations across the country. The charging station initiative of NEA has catalyzed the mass adoption of EVs in Nepal and massive private sector investments in EV charging infrastructures. NEA is taking a lead in adopting EV in its working fleet too.

Power Trade Agreement and Private Sector Engagement

NEA has been promoting private sector primarily in the generation sector, through Power Purchase

Agreements (PPA) to meet the country's energy demand and use of the competitive advantages sector of hydropower development. In FY 2024/25, 22 new projects from Independent Power Producers (IPPs) including NEA subsidiaries, with a combined capacity of 434 MW, were commissioned. This increased the total number of operational IPP-owned projects reaching to 204, with a combined capacity of 2,929.7 MW. Additionally, NEA's 5 subsidiary projects contributed 646.4 MW to this total.

Currently 142 projects with a combined installed capacity of 4,303 MW are under construction following financial closure. Another 148 IPPs projects totaling 4,203.476 MW are at various stages of development, awaiting financial closure.

During FY 2024/25, NEA signed 39 PPAs, including 31 hydropower projects with a combined installed capacity of 932 MW and 8 solar plants totaling 170 MW. This raised the total number of PPAs with IPPS to 494, with the combined capacity of 11,436 MW.

Cross Border Electricity Trade

FY 2024/25 marked a significant milestone in Nepal's electricity sector as NEA started exporting 40 megawatts of electricity to Bangladesh via India's transmission line from started from June 15, 2025, for the five-month monsoon season, following a tripartite agreement signed between Nepal, Bangladesh and India in October 2024.

Additionally, NEA continued its electricity trade with India through various mechanisms, including the Power Exchange Market (Day-ahead and Real-Time Markets), Medium-term Bilateral Agreements, and the Indo-Nepal Power Exchange Committee (PEC), maintaining robust cross-border energy cooperation. NEA has obtained the approval of 28 generators with combined capacity of 936.72 MW for exports to India with recent addition of another 200 MW of new plants. With collaboration of GON, NEA is maintaining continuous efforts for exporting more energy to the Indian market and other regional grids.

NEA continues to be net exporter of electricity in FY 2024/25 as well. The total electricity exports to India were 2,380 GWh, 22% increase compared to previous year whereas NEA imported 1,681 GWh of electricity from India which is about 11.3% less than of previous year. The revenue from total electricity export increased to NRs 17.47 billion, while total expenditure on import decreased to NRs 12.9 billion, resulting in net income of NRs. 4.57 billion for NEA from electricity trading in year 2024/25. The significant growth in net exports and net income underscores the potential cross border electricity trade to reduce Nepal's trade deficit, exporting its surplus electricity.

The Dhalkebar - Muzzafarpur 400 kV cross border transmission line is operational as the key power trade channel. Further in fostering potential power trade, NEA and Powergrid Corporation of India Limited inked a landmark agreement for the development of two new 400 kV cross-border transmission lines – Dododhara (Lamki)-Bareli and Inaruwa-Purnea on 23 April 2025 following the agreement reached by Nepal and India at 12th meeting of the Nepal-India Secretary-level Joint Steering Committee in New Delhi, India, on 12 February 2025. Implementation of these cross-border transmission lines will be instrumental in fulfilling Nepal's target to export 15,000 MW of electricity by 2035 and India's commitment to import 10,000 MW of electricity in next ten years.

Business through Subsidiaries

1. Chilime Hydropower Limited (CHCL)

CHCL, established in 1995 as NEA's first subsidiary with 51% ownership, operates the Chilime Plant (since 2003) and manages five subsidiaries: Sanjen Jalavidhyut Company Ltd. (SJCL) for Sanjen (42.5 MW) and Sanjen Upper (14.8 MW), Rasuwaghadi Hydropower Company Ltd. (RGHPCL) for Rasuwagadhi (111 MW), both operational in FY 2024/25; Madhya Bhotekoshi Jalavidhyut Company Ltd. (MBJCL) for Madhya Bhotekoshi (102 MW), recently commissioned; Chilime Seti Hydropower Company Ltd. (CSHC) for Chilime Seti (87 MW); and Chilime Engineering & Services Companies Ltd. (ChesCo) for consulting services. CHCL is also studying three hydroelectric projects on the Budi Gandaki River (total 219 MW).

2. Upper Tamakoshi Hydropower Limited (UTKHPL)

UTKHPL, established on March 9, 2007, as NEA subsidiary with 41% ownership, completed and commissioned the Upper Tamakoshi Hydroelectric Project (456 MW) in 2021. This daily peaking run-of-the-river plant, with an average annual energy generation of 2,281 GWh, began

commercial operations on August 20, 2021. UTKHPL is also developing the Rolwaling Khola Hydroelectric Project (22 MW) since 2022, which will extend peaking hours of the Upper Tamakoshi hydropower from 4 to 6 hours, even in the dry season.

3. Tamakoshi Jalavidyut Company Limited (TKJVCL)

TKJVCL is developing Tamakoshi V Hydroelectric Project (TKVHEP), a 99.8 MW cascade project of the Upper Tamakoshi Hydroelectric Project. Construction has just begun marking the progress of 15.34% as of the end of FY 2024/25. The estimated construction cost of the project is NRs. 21 billion and is financed through a tripartite loan agreement between TKJVCL, NEA, and Employees Provident Fund, with a debt-equity ratio of 65:35.

4. Modi Jalvidyut Company Limited (MJVCL)

MJVCL, a NEA subsidiary, is developing the Upper Modi 'A' Hydroelectric Project (UMAHEP, 42 MW) and Upper Modi Hydroelectric Project (UMHEP, 18.2 MW) in Annapurna Rural Municipality, Kaski District, as cascade developments along the Modi River. Pre-construction activities and financial closure for both projects are complete, with financing secured through a Syndicated Loan Agreement (SLA) for UMHEP and a Supplementary Syndicated Loan Agreement (SSLA) for UMAHEP, led by NMB Bank Limited, HIDCL, and Sanima Bank Limited. UMAHEP's civil and hydro-mechanical works (Lot-1) have started the construction works, while UMHEP's Lot-1 contract has been awarded and preparatory works are ongoing.

5. Dudh Koshi Javidyut Company Limited (DKJVCL)

DKJVCL, established on March 3, 2017, as a NEA subsidiary, is developing the 670 MW Dudhkoshi Storage Hydroelectric Project (DKSHEP) in Khotang and Okhaldhunga Districts. The project features a 600 MW main powerhouse and a 70 MW dam-toe powerhouse, supported by a 220-meter-high concrete-faced rock-fill dam creating a 31.5-km-long reservoir with 1,581 million cubic meters capacity. It is expected to generate 3,377 GWh annually (1,252 GWh dry season, 2,125 GWh wet season), which will be connected to the National Grid via an 81-km 400 kV transmission line to Dhalkebar Substation. The estimated project cost is USD 2.3 billion, financed through a mix of sovereign and non-sovereign loans and equity. Major construction is slated for 2026/2027, with financial closure expected in 2025/2026.

6. Chainpur Seti Javidyut Company Limited (CSJVCL)

CSJVCL, is developing the 210 MW Chainpur Seti Hydroelectric Project (CSHEP), a Peaking Run-of-River project on the Seti River in Talkot, Saipal, and Mastha rural municipalities, Bajhang District, Sudurpaschim Province. The project will generate 1,206.674 GWh annually, including 181.743 GWh (5-hour peaking).

The feasibility study and construction of access roads to the powerhouse have been completed. Adit tunnels and camp facilities at the powerhouse are under construction. The survey of 15-km 220 kV double-circuit transmission line from the switchyard to Bajhang substation has been completed. The Investment Board has approved the project. HIDCL is leading the discussions with EPF, Citizens Investment Trust (CIT), Social Security Fund (SSF) and commercial banks for the financial closure of the project.

7. Trilsuli Jalvidyut Company Limited (TJVCL)

TJVCL, established in 2011, aims to develop the 37 MW Upper Trishuli 3B Hydroelectric Project (UT3BHEP) in Nuwakot and Rasuwa districts. NEA and Nepal Telecom Company Limited (NTC) each hold a 30% equity share. UT3BHEP, a Run-of-the-River cascade project, utilizes water from the Upper Trishuli 3A tailrace tunnel.

An EPC contract signed in February 2018 was terminated in December 2023 due to the contractor's non-performance. The bid was rewarded for Lot 1-Civil Works and works have started, while the bidding of Lot 2 Electromechanical Works was starts again and is in under final stage of evaluation.

8. Raghuganga Hydropower Limited (RHL)

RHL, established on March 7, 2017, is developing the 40 MW Raghuganga Hydropower Project in Myagdi, Nepal. Financed by EXIM Bank of India's Line of Credit and joint investment from GoN and

NEA, this PROR project with 6-hour peaking is under construction. As of FY 2024/2025, civil and hydromechanical works are 86% completed, electromechanical works are 70% completed, with equipment installation ongoing. Completion is expected by December 2025.

9. Uttar Ganga Power Company Limited (UJPCL)

UJPCL, a subsidiary of NEA, was established on March 30, 2017, to develop the Uttar Ganga Storage Hydroelectric Project in Baglung District, Gandaki Province. Initially licensed for 300 MW in FY 2015/16, the project's capacity was increased to 828 MW in FY 2017/18. It features a 200 m high rock-fill dam, an 8.51 km headrace tunnel, and large underground powerhouses. A 65 km, 400 kV DC transmission line is planned to connect the powerhouse to the Uttar Ganga Hub in Rukum. In FY 2024/25, a contract was signed with NEA Engineering Company for a feasibility review and in-basin study alternative.

10. Tanahu Hydropower Limited (THL)

THL was established on 25 March 2012, as a subsidiary of NEA. THL is developing the Tanahu Hydropower Project (formerly Upper Seti) in Tanahu District. This 140 MW storage-type project, with an estimated annual energy generation of 502.58 GWh, is financed by ADB, JICA, EIB, NEA, and GoN. Currently under construction, it has achieved approximately 67% overall progress. The project is expected to be commissioned in FY 2027/28.

THL is also developing the 126 MW Lower Seti Hydropower Project, utilizing regulated discharge from Tanahu's tailrace and Madi River flows. Detailed design and environmental studies are nearly complete, land acquisition is ongoing, and construction/test audits are in progress. Discussions for financing are underway with JICA and ADB.

11. Upper Arun Hydroelectric Limited (UAHEL)

UAHEL, an NEA subsidiary established in 2017, is developing the 1063 MW Upper Arun Hydropower Project in Sankhuwasabha, Nepal, a transformative project for the hydropower sector. All preparatory activities—land acquisition, compensation, environmental compliance, approvals, and geological investigations—are completed. The World Bank is leading discussions for the financial closure of the foreign portion ($1.89 billion) whereas on domestic side, MoU has been signed for investing NRs. 53.14 billion through a consortium led by HIDCL. The design and bidding documents have been prepared for the associated Ikhuwa Khola Hydropower Project and geological investigations are ongoing. Access road with tunnel is under construction, and preparations are ongoing to start construction in the power house upon obtaining the generation license.

12. NEA Engineering Company Limited (NEC)

NEC, established on March 3, 2017, under Nepal's National Energy Crisis Reduction and Electricity Development Decade Action Plan-2072, as a government-sector engineering consultancy firm is focused on hydropower and infrastructure development. NEC has completed feasibility and detailed design for major hydropower projects like Jagadulla, Betan, Fukot Karnali, Mugu Karnali, and Kimmanthaka Arun, as well as high-voltage transmission lines. It also provides construction supervision for projects like Bheri Babai Irrigation, Modi, and Rolwaling HEPs, collaborating with international firms to enhance engineering capacity for national development. This company has emerged to be the leading consulting company of Nepal in energy sector.

13. Nepal Power Trading Company Limited (NPTC)

NPTC was incorporated on 7th March 2017 as a subsidiary company of NEA, with the broad objective of facilitating power trading both within and outside the country. The company has obtained Trading License from Ministry of Energy, Water Resources and Irrigation.

14. Power Transmission Company Nepal Limited (PTCN)

PTCN, a subsidiary of Nepal Electricity Authority was incorporated on 16th September 2007 with an objective of developing high voltage transmission interconnection system between Nepal and India for the mutual interest and benefit of both the countries. Shareholders of PTCN are Power Grid Corporation of India, HIDCL,

ILFS Energy Development Company and NEA. PTCN has already commissioned with two Joint Venture companies - one in India and other in Nepal were incorporated for implementation of 400 kV double circuit line interconnection between Muzaffarpur in India and Dhalkebar in Nepal.

Way Forward

The Nepal Electricity Authority (NEA), being a government-owned utility, is committed to providing reliable, affordable, and high-quality electricity while maintaining financial stability and sustainability to support the further development. This dedication has earned public trust and optimism for the whole energy sector development. However, NEA being in the cross road of various threats and challenges, our primary focus will be continuing advancing to support GON goal and priorities and at the same time, NEA will focus on enhancing operational efficiency and financially sustainability through its operation. The plans and strategies will be activated to increase domestic consumption, with self-reliance distribution system and focusing on surplus electricity exports to neighboring countries to manage the wet season surplus energy which in turns also reduces the trade deficit of the whole economy.

Being a key partner of GON, NEA supports GON targets in achieving the goal of 28,500 MW production within 2035. For the generation expansion, NEA will continue developing hydropower projects independently, with joint ventures, and through subsidiaries, prioritizing various projects scaling medium to large-scale reservoir and peaking projects. In facilitation for the healthy energy mix NEA is not only facilitating peaking ROR and storage projects and Solar project to IPPs but also NEA has been taking initiatives to develop the various types of projects from medium to large scale. Various level studies have been ongoing for PROR projects like Chainpur Seti (210 MW) and Tila Hydroelectric Project (70.37 MW) located in the Jumla District. Priority will be given to Pump Storage project which will support for the daily peak management. Lower Seti (126 MW), Chilime Seti (87 MW) are almost ready for further development through subsidiaries. Large project Upper Arun (1063 MW) and Dudhkoshi Reservoir Project (635 MW) are on the way to financial closure and construction. The discussion with World Bank and ADB and other partners for the respective projects are ongoing for their financial arrangement.

NEA also plans to implement Battery Energy Storage Systems (BESS) to improve energy security during the dry season and for energy arbitrage during the wet season. Storage technologies can also serve as a standby power source to maintain the grid stability. This state-of-the-art technology could be instrumental for energy balance, energy security and could be helpful in managing demand gap in the system particularly in dry season. Further studies will be initiated for BESS and potential engagement of private and PPP models will be explored.

NEA is focused on upgrading transmission and distribution infrastructure to ensure reliable supply and boost power exports. The construction of a new 400 kV transmission line from New Butwal to Lamahi will be started next fiscal year. Further, two major 400 kV transmission lines: Barhabise – Kathmandu and Hetauda – Dhalkebar will be completed and brought to operation by next fiscal year.

NEA has proposed four priority high voltage transmission lines: Tingla-Dudhkoshi-Dhalkebar 400 kV Transmission Line, Arun Hub – Inaruwa 400 kV Transmission Line, New Khimti – Dhalkebar 400 kV Transmission Line and Lapsifedi – Teenpiple 220 kV Transmission Line to implement in PPP mode through Annual Required Revenue (ARR) based competitive bidding process. For this, NEA has already conducted market sounding exercise and looks forward to publishing bids soon.

High-capacity cross-border transmission lines with India, including the Butwal-Gorakhpur 400 kV line is in progress and will be completed within this fiscal year and is planned to be charged at 220 kV. A 220 kV cross border transmission line from Chilime to Kerung is also planned and is under detail study between Nepal-China. This will further strengthen Nepal's power grid and also increase power trading capacity.

For the distribution sector, NEA will prioritize the national goal of achieving full electrification throughout the country. NEA will prioritize and make efforts in expanding distribution system in remaining areas for full access and coverage throughout the country for full electrification. NEA will focus on grid reinforcement, upgradation, modernization and automation in distribution substation for reliable power supply to the consumers. To increase domestic demand, NEA continues to promote clean energy transitions in cooking, transportation, irrigation and

industries, reducing fossil fuel imports. Further, NEA is also exploring potential use of excess energy in green hydrogen production and other innovative technologies. Grid modernization with Substation Automation System (SAS) and integration in SCADA system has been already initiated and will be further reinforced for the reliable power supply. The use of SMART meter in the distribution system particularly for new three phase consumers have already been started and further expansion of smart meters in the distribution system will be expanded. The data of supply reliability measured and extracted from the smart meters will provide undisputed and factual reference data for future performance measurements.

NEA continues to utilize information and new technology to enhance operational efficacy. NEA will focus on digital transformation, automation, and secure IT infrastructure. The modern Distribution Control Center and Data Center in Syuchatar will drive NEA's digitization, aligning with the government's Digital Nepal vision. Organizational restructuring will be guided by the updated Corporate Development Plan and potential amendments to the NEA Act remain a priority. Use of human capitals and enhancing their efficacy will be focused through motivation and training. As part of digital NEA, Online Evaluation System and performance monitoring have been started in NEA system. Accountability and responsibility in HR system is expected with such enforcement.

Acknowledgement

On behalf of NEA, I express heartfelt gratitude to all the contributors to our achievements. My sincere gratitude to the Right Honorable Prime Minister for fostering an enabling environment for hydropower development, and to the Honorable Minister of Energy, Water Resources and Irrigation, and NEA Board Chairman, for his proactive leadership in guiding the policies and programs of NEA. I also express my appreciation for the valuable support from the Honorable State Minister and the Secretary of MoEWRI for their steadfast guidance.

I extend my gratitude to the NEA Board of Directors for their support policymaking and decision making within the framework of NEA Act, 1984, and to the Government of Nepal, particularly the Ministries of Energy, Finance, and others, for their continuous support in the line ministries. The parliamentary committees and the Electricity Regulatory Commission (ERC) deserve deep appreciation and thanks for their oversight and regulatory supports.

I am grateful to our development partners—World Bank, ADB, JICA, EU, EIB, AIIB, KfW, NORAD, USAID, Saudi Fund, OPEC Fund, and Exim Banks of India, China, and Korea—for their ongoing commitment to Nepal's energy needs. Special appreciation goes to Employees Provident Fund, Citizen Investment Trust, HIDCL, and Rashtriya Beema Sansthan for meeting our investment needs, and to banks, auditors, IPPs, suppliers, and investors for their trust.

I acknowledge generous and supportive power utilities of Bihar and Uttar Pradesh, and Indian power trading companies (NVVN and PTC India Limited) for their role in cross-border power trade. The media's efforts in sharing accurate information are commendable, and I seek their continued support. I also thank my predecessors for their invaluable contributions to NEA's growth over the four decades of our journey.

The dedication of NEA's staff, including Employee Unions, has been vital to our performance and operations, even in challenging times. Finally, I sincerely thank our valued consumers and professional organizations for their patience and encouragement, assuring them of our commitment to ensuring a reliable, safe, and continuous power supply in the future.

Thank you.

Hitendra Dev Shakya
Managing Director

GENERATION DIRECTORATE

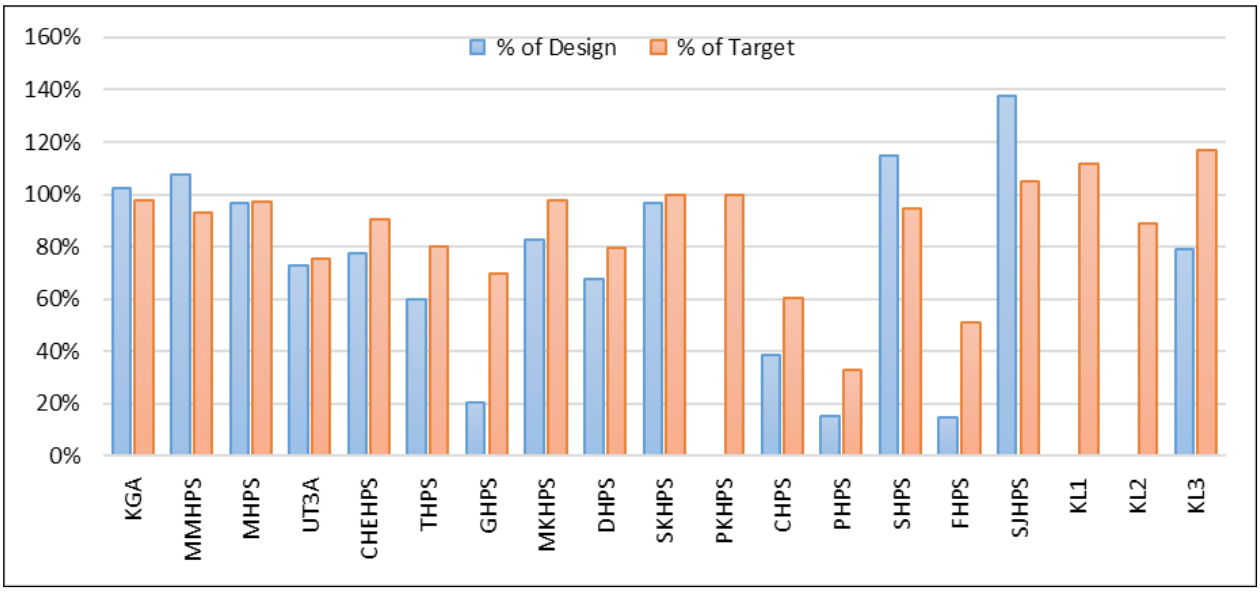
The Generation Directorate, operating under the leadership of the Deputy Managing Director, is responsible for the efficient operation and maintenance of hydropower stations owned by the Nepal Electricity Authority (NEA). It oversees the management of twenty hydropower plants and two thermal power stations, with a combined installed capacity of 627 MW. The Directorate is committed to maximizing energy production through the optimal utilization of resources. This is achieved by implementing periodic overhauls, preventive maintenance measures, and targeted rehabilitation programs across the generating facilities. The organizational structure of the Directorate includes three departments and two divisions dedicated to supporting its mission.

1. Large Generation Operation and Maintenance Department
2. Medium Generation Operation and Maintenance Department
3. Generation Development and Support Department
4. Finance Division
5. Administration Division

Timeline of Hydropower Development by NEA

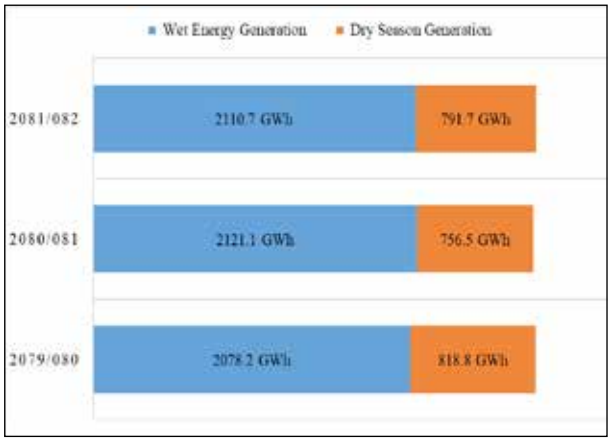
Major Achievements

For the Fiscal Year 2081/82 Sunkoshi and Sundarijal HPS achieved generation more than 100% of the target. Whereas Kaligandaki 'A', Middle Marsyangdi, Marsyangdi, Chameliya, Upper Trishuli 3A, Modi, Puwakhola, Seti HPS have achieved more than 90% of target generation.

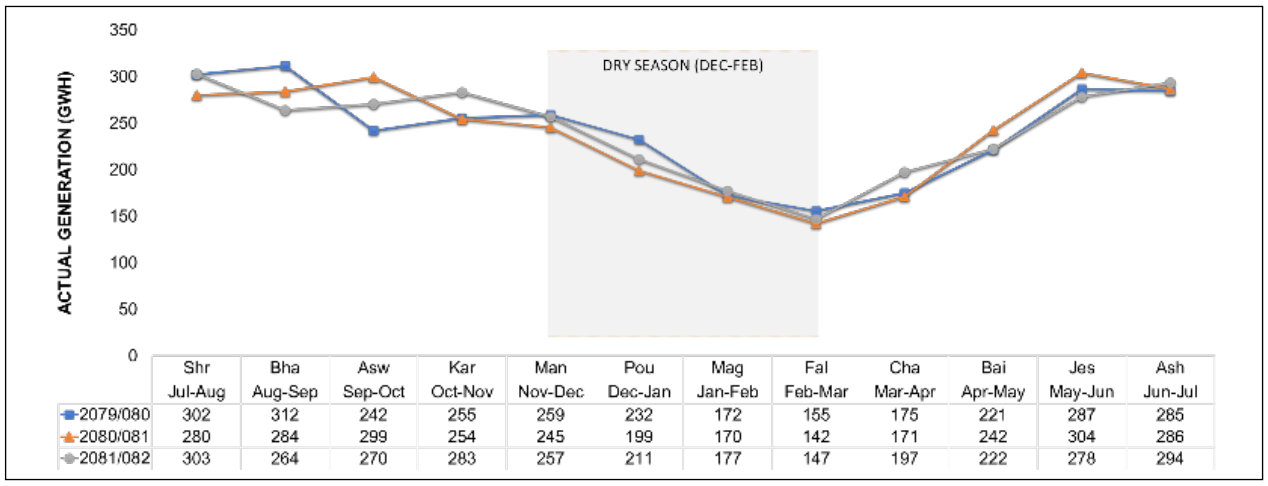


Comparison: % of designed vs % of Target (FY 2081/82)

In the case of the storage power plant, the maximum and minimum water level of Kulekhani reservoir was recorded as 1531.5 and 1486.3 MASL. With effective utilization, altogether the combined generation of KL1, KL2 and KL3 reached 279.8 GWh in this fiscal year.

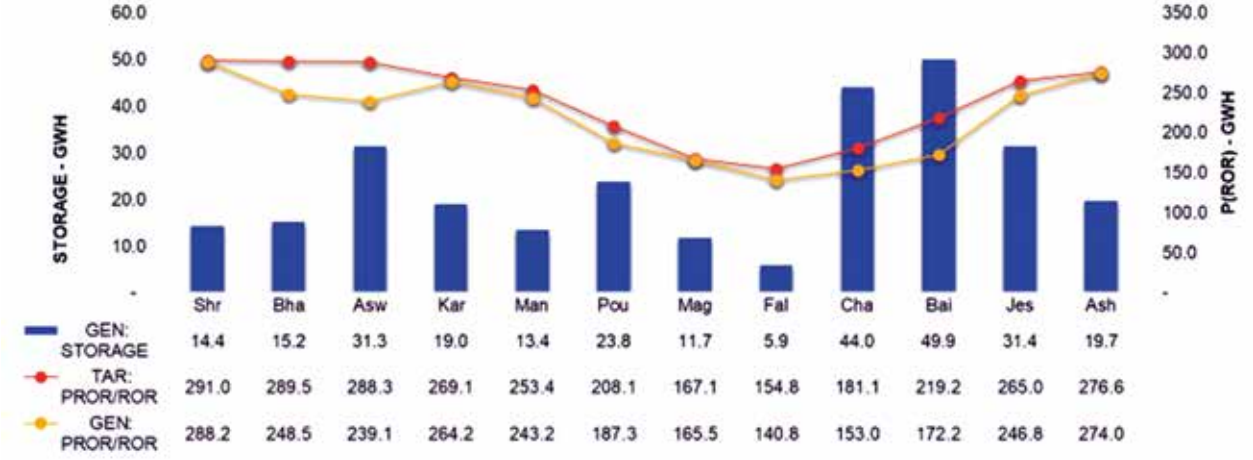


Wet vs Dry Season Generation of last three fiscal years



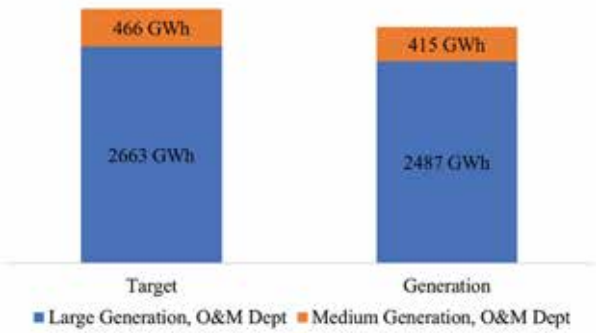
	Shr Jul-Aug	Bha Aug-Sep	Asw Sep-Oct	Kar Oct-Nov	Man Nov-Dec	Pou Dec-Jan	Mag Jan-Feb	Fal Feb-Mar	Cha Mar-Apr	Bai Apr-May	Jes May-Jun	Ash Jun-Jul
2079/080	302	312	242	255	259	232	172	155	175	221	287	285
2080/081	280	284	299	254	245	199	170	142	171	242	304	286
2081/082	303	264	270	283	257	211	177	147	197	222	278	294

Monthly seasonal variation of last three fiscal years



Energy generation pattern of PROR/ROR and storage (GWh)

Energy from Run-of-River (ROR) and storage facilities is used seasonally. ROR energy dominates during the monsoon and post-winter seasons, while storage energy maintains balance. Generation rises from Chaitra to Shrawan, then declines until Falgun, with peak storage use in Baisakh.



% contribution of Medium and Large Generation, O&M Department

1. Large Generation Operation and Maintenance Department

Power plants with installed capacity of 30 MW and above, including seven hydropower plants totaling 465 MW, fall under this department. In fiscal year 2081/82, these plants generated 2487 GWh, about 86% of the total annual generation.

All plants operate year-round except Kulekhani I, II, and III, which are seasonal storage-based. Out of the seven plants, four (Kaligandaki, Middle Marsyangdi, Marsyangdi, Chameliya) are peaking run-of-river (PROR), two (Kulekhani I and II) are storage-cascade, and one (Upper Trishuli 3A) is run-of-river (ROR). Kulekhani I stores monsoon water and operates mainly during the dry season to meet peak demand.

Kali Gandaki 'A' Hydropower Station

Kali Gandaki 'A' Hydropower Station is the largest power station of the department with an installed capacity of 144 MW and with 3 units each having capacity of 48 MW. It is a six-hour daily peaking run-of-river type power station having an annual design generation of 842 GWh and it was commissioned in 2002 AD.

The cumulative generation of the Plant till the end of FY 2081/82 reached 18,120.592 GWh from the first run. The plant generated 863.476 GWh of energy this year which was more by 2.60 % compared to the previous year, 2.48 % more than annual design and 97.62 % of target generation this year.

In this fiscal year, major overhauling of Unit 1 was completed, including turbine runner, wicket gates, and headcover replacement. Dam repairs were done on diversion, under sluice, and flushing gates, with sill beams and seals replaced. TRCM systems were fully overhauled. Two GIS bays were added for the 132 kV Ridi line, and maintenance was performed on the 132 kV SF6 breaker at Lekhnath Bay. Three downstream spillway gates were rehabilitated, and Unit 2's generator coils and bars were replaced after a stator earth fault.

Unit No.1 overhauling works

Middle Marsyangdi Hydropower Station

Middle Marsyangdi Hydropower Station (MMHPS) is a 70 MW peaking run-of-river plant located in Lamjung District, Gandaki Province. It diverts water from the Marsyangdi River—originating from Tilicho Lake—and can reserve flow for up to five hours of peaking operation, even during low discharge. Commissioned in 2008, the plant was inaugurated on December 14 and began commercial operation a month later.

With a design generation of 398 GWh annually, MMHPS has generated a cumulative total of 7091.1 GWh as of FY 2081/82. This year's generation reached 427.9 GWh—3% lower than last year but 107.6% of the design target.

In this fiscal year, overhauling of Unit 2 was completed and desander basins were restored in-house. Spillway chute no. 1 was rebuilt with M60 concrete, steel lining, and epoxy coating. Modern upgrades included a digital governor panel, 110V battery bank, and RTU for real-time LDC communication.

Radial gates repair works

Marsyangdi Hydropower Station

Marsyangdi Hydropower station is a peaking run-off-river type power station, located in Tanahun district in the Gandaki province. With installed capacity of 69 MW and annual design generation of 462.5 GWh, this plant has 4 hours of peaking capacity. It was commissioned in 1989 AD.

The cumulative generation of the plant till the end of FY 2081/82 reached 15046.929 GWh from its first run. The plant generated 451.8 GWh of energy this year which is 1.28% more compared to the previous year. This value is 97% of target generation this year and is 97% of designed generation.

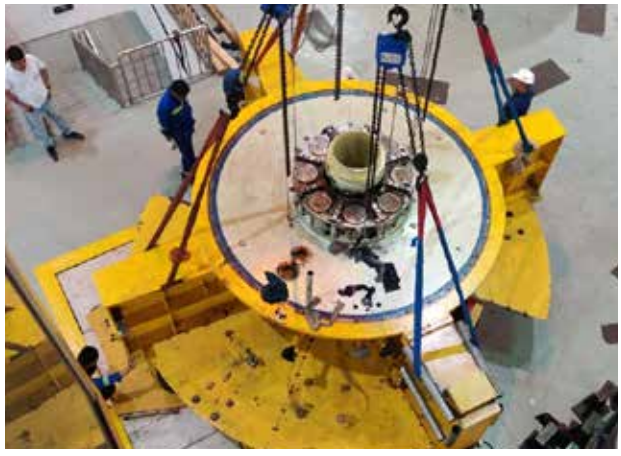
The plant completed the overhaul of Unit No. 2 In this fiscal year, and maintained key infrastructure, including radial gates, desander basin floating boom, and gantry crane wire rope. Repairs included the hook block, shaft seal, and sliding ring of Unit No. 3.

Overhauling of Unit No-2

Upper Trishuli 3A Hydropower Station

Upper Trishuli 3A Hydropower Station is a run-of-river (ROR) type hydropower station with an installed capacity of 60 MW and 70% POE. This plant is located in Rasuwa and Nuwakot districts of Bagmati Province of Nepal. It is the second largest hydropower station of NEA in terms of annual design energy generation. It has the annual designed generation capacity of 489.76 GWh having two vertical Francis units each of capacity 30 MW. The cumulative generation of the plant till the end of FY 2081/82 reached 2391.5 GWh from its first run. The plant generated 356 GWh of energy this year which is 17% less compared to the previous year. This value is 78% of target generation this year and is 73% of designed generation.

In this fiscal year, for the first time, NEA's in-house team overhauled Units 1 and 2, including repairs to draft tube gates, inlet valves, and head covers. Radial gates underwent major maintenance, with seals, plates, and rail bars replaced. SCADA systems and communication links were restored, with sensor and PLC upgrades. Civil works included pre-monsoon concrete repairs and gabion spur construction near the tailrace.



Lifting of upper bracket during overhauling

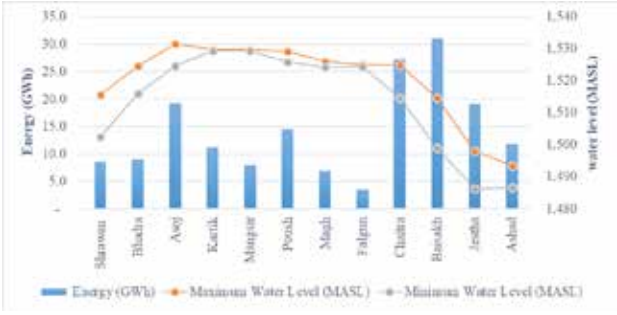
On the morning of 2081/03/24 at approximately 4:30 AM, a sudden flood event caused by intense rainfall in the upper catchment area led to the uncontrolled inflow of water and debris into the dam premises. Due to the absence of early warning, several key structures were affected, including the deck and control room. Fortunately, no human casualties were reported.

Initial assessments revealed damage to Diversion Radial Gate-1, with about 1.5 meters of the lower gate skin plate detached and its control panel and hydraulic unit submerged. Gates 2, 3, and 4, though structurally intact, are currently inoperative due to damaged hydraulic systems. Specifically, Gate-2's pressure unit was submerged, and Gate-3's hydraulic cylinder was broken. The stoplog gantry crane and lifting mechanism were also damaged, affecting gate isolation operations.

Civil structures such as the control building, upstream and downstream piers, staff quarters, and operating platforms were impacted by debris and silt deposition. Additionally, gate operating panels, motors, and sensors were submerged and are presently non-functional.

Kulekhani I Hydropower Station

Kulekhani-I, Nepal's only reservoir-type hydropower station, is located in Dhorsing, Makwanpur, with a capacity of 60 MW (2×30 MW). Designed for peaking, it also supports voltage and system stability. It generates 165 GWh primary and 46 GWh secondary energy annually. By FY 2081/82, cumulative generation reached 5,785.9 GWh, with 170.56 GWh generated this year—a 64.5% rise from the previous year. Hydrological data for FY 2081/82 recorded the reservoir's maximum water level at 1,531.5 meters above sea level (on 2081/06/12), while the minimum level was recorded at 1,486.28 meters above sea level (on 2082/02/30).



Response of reservoir water level with corresponding monthly generation

The Kulekhani Reservoir has a 65 m uncontrolled spillway and two radial gates designed for operation at EL. 1530 masl. On 12th Ashoj 2081 (FY 2081/82), heavy rainfall caused the water level to rise beyond the spillway's capacity. As per the operational manual, both radial gates were opened at EL. 1530.20 masl to stabilize the reservoir.

Machine floor of KL1

Kulekhani II Hydropower Station

Kulekhani-II Hydropower Station, a 32 MW cascade plant commissioned in 1986, utilizes tailrace water from Kulekhani-I, along with flow from the Mandu River and Rapti Pumping Station, to produce 104.6 GWh annually. Each year, the Mandu intake is cleaned post-monsoon, and the Rapti Pumping Station is maintained and operated as needed during the dry season to support power generation.

The cumulative generation of the plant till the end of FY 2081/81 reached 2,436.5 GWh from its first run. The plant generated 74.9 GWh of energy this year which is 56% more compared to the previous year. This value is 89% of target generation this year.

In this fiscal year work on 7.2 kV VCB switchgear is ongoing. Transformer oil filtration was done on three spares, and a damaged 600 sq.mm conductor was replaced. Civil works included filter replacement and wall construction at Mandu and Rapti intakes, along with surge tank road repairs.

6.6 kV Bus conductor maintenance

Chameliya Hydropower Station

Chameliya Hydropower Station, a daily peaking run-of-river (PROR) scheme with an installed capacity of 30 MW is in Darchula district in far western province. It has a designed annual generation of 184.21 GWh.

The cumulative generation of the plant till the end of FY 2081/82 reached 1091.2 GWh from its first run. The plant generated 142.4 GWh of energy this year which is 6% more compared to the previous year. This value is 91% of target generation this year and is 77% of designed generation

In this fiscal year, Unit 2 was overhauled in Ashoj/Kartik 2081, followed by the overhaul of Unit 1 in Ashad 2082. Key equipment upgrades included procurement and installation of a VCB at the substation, a vertical sump pump, and a nitrogen refill plant. Additionally, the 3 MVA transformer (33/11 kV) at the switchyard was replaced.

Stator of unit-2 during overhauling

Repair of generator side covers during overhauling

2. Medium Generation Operation and Maintenance Department

The Medium Generation Operation and Maintenance Department, led by a Director, oversees plants with capacities under 30 MW—including one PROR, twelve ROR, one diesel, and one multifuel plant. The diesel and multifuel plants, managed by Chatara and Kulekhani III HPS respectively, are currently not in regular operation due to the growing reliance on hydropower. The department's total installed capacity is 123.03 MW. In FY 2081/82, 15 active plants generated 415 GWh—about 14% of NEA's total and 89% of the 466 GWh target.

Trishuli Hydropower Station

Trishuli Hydropower Station, located in Nuwakot district, was commissioned in 1967 with 21 MW capacity (7 units × 3 MW) funded by the Government of India. It was rehabilitated in 1995, upgrading to 24 MW with six 3.5 MW units and one 3 MW standby unit. As a peaking run-of-river plant, it has a peaking capacity of 21 MWh and an annual design generation of 163 GWh. By FY 2081/82, cumulative generation reached 6,031.9 GWh. This year, it produced 97.7 GWh—17% below last year's output, achieving 81% of its target and 60% of the design capacity.

Powerhouse maintenance covered rotor shaft work (Unit 1), bearing repairs (Units 2, 5, 6), MIV repair (Unit 2), and oil cooler installation (Unit 1).

As part of rehabilitation, a 10 MVA (66/11 kV) and an 18 MVA (6.6/66 kV) transformer were installed, tested, and commissioned. A 6.6 kV, 3000A switchgear and a 400V, 300A LT AC panel were also commissioned. The project modernized and redesigned the auto guide vane closing system across all units, improving overspeed protection.

Devighat Hydropower Station

Devighat Hydropower Plant is a cascade development of Trishuli Hydropower Plant with installed capacity of 15 MW and annual design generation of 114 GWh. It is located at Devighat, Nuwakot. The capacity of the units was improved and upgraded from an initial 14.1 MW which was initially commissioned in 1984.

The cumulative generation of the plant till the end of FY 2081/82 reached 3496.1 GWh from its first run. The plant has generated 76.4 GWh of energy this year which is 12% less compared to the previous year. This value is 80% of target generation this year and is 68% of designed generation.

This fiscal year, the hydropower plant completed a full overhaul of Unit 3's turbine and generator, installed a new brake and jacking system, and restored SCADA. Station supply was upgraded with a 33kV breaker and isolator. Repairs were made to Unit 2's rotor connections and Unit 3's excitation system. Infrastructure improvements included new fencing and a staff room at the substation.

Repair works on draft tube during overhauling

Kulekhani III Hydropower Station

Kulekhani III Hydropower Station, with a 14 MW capacity and annual generation of 40.85 GWh, is a cascade of the Kulekhani Storage Project (Kulekhani I and II). It primarily uses regulated flow from Kulekhani II and the natural flow of Khani Khola for power generation.The cumulative generation of the plant till the end of FY 2081/82 reached 176.3 GWh from its first run. The plant has generated 34.3 GWh of energy this year which is 54% more compared to the previous year. This value is 117 % of target generation this year and is 79% of designed generation.

Recent upgrades included shaft alignment and generator bearing replacement in Unit 2. Station service 7.2 kV vacuum circuit breakers were installed and commissioned in Units 1 and 2.

Gandak Hydropower Station

Gandak Hydro Power Station is located at Pratappur Gaun Palika ward no. -7, Nawalparasi. Constructed in 1979, the powerhouse is a part of the irrigation cum power generation scheme on Gandak River. The plant has three horizontal mounted tubular bulb turbines (one being Standby unit); low head high discharge Kaplan Turbogenerators of 5 MW each with an aggregate capacity of 15 MW and annual design generation of 106.38 GWh. The cumulative generation of the plant till the end of FY 2081/82 reached 1113.6 GWh from its first run. The plant has generated 14.3 GWh of energy this year which is 29% less compared to the previous year. This value is 70% of target generation this year and is 20% of designed generation value.

In FY 2081/82, Gandak Hydropower Station performed major maintenance to address aging infrastructure. Units 2 and 3 were fully overhauled, including repairs to seals, bearings, and cooling systems. Electrical works covered transformer oil filtration, PMG coupling replacement, cable upgrades, and switchyard servicing.

Runner repair works for Unit No.2

Modi Khola Hydropower Station

Modikhola Hydropower Station is located at Dimuwa in Parbat district. It has installed capacity of 14.8 MW with two vertical shaft Francis Turbines, 7.4 MW each and annual design generation of 92.5 GWh. The cumulative generation of the plant till the end of FY 2081/82 reached 1438.3 GWh from its first run. The plant has generated 75.3 GWh of energy this year which is 4% less compared to the previous year. This value is 97% of target generation this year and is 83% of designed generation.

This fiscal year, the plant underwent key upgrades, including Unit 2 turbine overhauling, Unit 1 transformer lifting, rotor-stator inspection, and 132 kV transformer maintenance. Electrical works included new 11 kV lines and conductor replacement.

Rotor installation works

Sunkoshi Hydropower Station

Sunkoshi Hydropower Station located 81 km east from Kathmandu, in Sindupalchowk district is a run-of-river daily pondage power station with an installed capacity of 10.05 MW and annual design generation of 70 GWh. This station has 3 units of 3.35 MW each. The cumulative generation of the plant till the end of FY 2081/82 reached 3320.2 GWh from its first run. The plant has generated 60.6 GWh of energy this year which is 4% more compared to the previous year. This value is 100% of target generation this year and is 97% of designed generation

This fiscal year, extensive upgrades were completed to boost reliability and efficiency, including soft coating of the Francis turbine and guide vanes. Electrical enhancements included slip rings, carbon brushes, hoists, a dry-type excitation transformer (6.3/270, 160 kVA), and an oil filtration system. Bypass gates were added at the dam for improved flexibility.

Illam (Puwa Khola) Hydropower Station

Ilam (Puwakhola) hydropower station, run-off river type plant, located at Golakharka, Ilam having an installed capacity of 6.2 MW and annual design generation of 48 GWh was commissioned in 1999 AD. The cumulative generation of the plant till the end of FY 2081/82 reached 798.4 GWh from its first run. The plant has generated 34.6 GWh of energy this year which is 2% more compared to the previous year. This value is 100% of target generation this year.

This fiscal year, repairs included penstock rectification and stator coil refurbishment with new cables and insulation. Additional work involved repairing the Pelton runner and bearings, maintaining the switchyard and transformers, repairing access roads, constructing a new store, building a coffer dam, fixing the chute, and clearing bushes and debris along the penstock and reservoir.

Penstock rectification works from Anchor Block AB#03 to AB#5A

Chatara Hydropower Station

Chatara Hydropower Station, a 3.2 MW canal drop plant in Sunsari, was commissioned in 1996 with support from the Government of India. It has a design generation of 6 GWh annually and now also manages the non-operational Multi Fuel Power Plant. By FY 2081/82, its cumulative generation reached 70.8 GWh. This year, it generated 2.3 GWh—32% more than the previous year, achieving 61% of the target and 39% of the design generation. Recent upgrades at the hydropower station include the installation of a 50kVA DG set in the powerhouse, replacement of the vane pump set and accumulator in the governor OPU, and modification of hydraulic pipelines for the braking system and OPU.

Intake Canal of Chatara HPS

Panauti Hydropower Station

Panauti Hydropower Station, Nepal's third oldest plant, is a run-of-river facility on the Roshi Khola with a powerhouse in Khopasi, Kavre. Commissioned in 1965 with Soviet and GoN support, it has three 800 kW Francis turbines (one standby) and a design generation of 6.97 GWh. It also serves irrigation and drinking water needs. By FY 2081/82, cumulative generation reached 150.6 GWh. This year, it generated only 1 GWh—63% less than last year, meeting just 33% of the target and 15% of design generation—due to severe flood damage in Asoj.

Restoration Plan After 2081 Ashoj Flood

Severe floods and landslides on Ashoj 11–12, 2081, caused major damage to the powerhouse and headworks, submerging equipment and filling the forebay pond with debris. Control panels were destroyed, and the plant remains non-operational.

Immediate actions included drainage works, gabion/revetment wall construction, and debris

clearing. Key equipment are being inspected, with many found operable.

The restoration plan includes:

- New control panel installation
- Landslide protection
- Forebay and headworks cleaning

Power house: Before and after the flood

Seti Hydropower Station

Seti Hydropower Station is a run-of-river plant located at Nadipur, Pokhara, with an installed capacity of 1.5 MW (3 units of 0.5 MW each) and a design generation of 9.8 GWh. It was commissioned in 1985 AD with support from the Government of the People's Republic of China and the Government of Nepal.

The cumulative generation of this plant till the end of FY 2081/82 reached 394.2 GWh from its first run. The plant has generated 11.3 GWh of energy this year which is 4% less compared to the previous year. This value is 95% of target generation this year and is 115% of designed generation.

This fiscal year, key upgrades included upgrading 1 km of the 11 kV transmission line with PVC-covered conductor; installing digital excitation systems on Units 2 and 3; and fitting hydraulic butterfly main inlet valves on Units 1 and 3. The old EOT crane was replaced, a new trash rack with hoisting commissioned, Unit 3 fully overhauled, and all six desander flushing gates maintained—enhancing efficiency, safety, and reliability.

EOT crane installation works

Fewa Hydropower Station

Fewa Hydropower Station, a 1.0 MW canal drop plant in Pokhara with four 0.25 MW units, was commissioned in 1969 with India-Nepal collaboration. Despite unit availability, public encroachment of the power canal affects operations. By FY 2081/82, cumulative generation reached 104.9 GWh. This year, it generated 1 GWh—13% less than last year, achieving 51% of its target and 15% of design generation.

This fiscal year, Unit 3 was fully overhauled to restore performance. Civil repairs were done on the headrace canal, control room, store room, and powerhouse. To prevent erosion and encroachment, concrete pillars were built along 1.5 km of the power canal's right bank.

Overhauling of unit no. 3

Sundarijal Hydropower Station

Sundarijal Hydropower Station, located 15 km northeast of Kathmandu, serves both water supply and power generation. Commissioned in 1934 under the Colombo Plan, it has two turbo-generators totaling 970 kW capacity and is Nepal's second oldest hydropower plant. By FY 2081/82, cumulative generation reached 160.2 GWh. This year, it generated 6.6 GWh—6% above last year, achieving 105% of its target and 138% of its design generation.

OPU repair works

Pharping Hydropower Station

Pharping Hydropower Station is the first Power Station built in Nepal, and it has held the legacy of hydropower development in Nepal for more than a century. It was inaugurated by the late king Prithivi Bir Bikram Shah Dev on Monday, 22 May 1911 (B.S. 1968, 9th Jestha).

Proposed layout for Pharping Museum

It was constructed with a grant from British Government at a cost of NRs. 0.713 million. It is in Pharping of Kathmandu district, nearly 12 km south of the city. There are two units each 250 kW with an aggregate installed capacity of 500 kW. As the water from the penstock has been diverted to drinking water supply to Kathmandu by KUKL, the plant is not being operated for generation nowadays though it has been placed in standby mode to operate occasionally and to demonstrate to the visitors.

Thermal power plants

NEA owns two thermal power plants, both largely inactive due to hydropower dominance.

Hetauda Diesel Power Plant (14.41 MW) in Makawanpur was commissioned in phases (1963 and 1980) with British and Nepali support. Now managed by Kulekhani III HPS, it has mainly operated for testing in recent years and has generated 155.53 GWh cumulatively. Multifuel Power Plant in Bansbari, Morang (39 MW), commissioned in 1990/91 and expanded in 1997/98, uses six Wartsila diesel engines fueled by furnace oil. It features two Leroy Somer and four Alstom generators and is overseen by Chatara HPS. A major overhaul was completed in 2013, and the plant has generated about 593 GWh since commissioning.

Hetauda Diesel Plant and Multifuel Power Plant

3. Generation Development and Support Department

This new department develops power projects and supports plant operations. NEA partnered with Kathmandu University last fiscal year on a green hydrogen project to boost hydropower use and industrial growth. KU submitted a "Desk Study Report," and work is ongoing. This department ensures reliable operation of power plants under the Generation Directorate by providing technical assistance through expert deployment and advisory support. It also reviews inception, assessment, and final reports for power plant rehabilitation and modernization projects.

4. Electromechanical Workshop Construction Project

NEA is developing a modern electromechanical workshop under the Generation Directorate to repair and maintain electromechanical equipment for its powerhouses. Initially, it will focus on turbine repairs, fabricating small-to-medium parts, and producing hydro mechanical components for NEA and IPPs. Long-term plans include large component fabrication, on-site overhauls, material testing, electrical assessments, and workforce development.

Progress includes completing a feasibility study, selecting the Aanboo Khaireni site, finalizing building designs and costs, and starting construction bidding. Technical specs for machinery are being prepared, with retendering planned after budget approval.

Design Plan of Electromechanical Workshop

5. Hydropower Automation Project

Several NEA-operated hydropower plants are facing operational challenges due to aging infrastructure and obsolete technology, particularly the use of outdated relay logic and manual gate control systems. Plants like Kulekhani I, Kulekhani II, Marsyangdi, and Kaligandaki 'A' are experiencing frequent tripping, maintenance difficulties, and delayed emergency responses.

To modernize these systems, NEA launched the Hydropower Plant Automation Project in FY 2079/80. The initiative focuses on upgrading to PLC-based control systems, numerical relays, and integrating SCADA and DCS technologies. In FY 2080/81, the first phase began with the contract award for upgrades at Kulekhani I and II. Installation work is now underway in the current fiscal year, marking a key step toward improving reliability and efficiency across NEA's hydropower fleet.

TRANSMISSION DIRECTORATE

The Transmission Directorate, under the leadership of a Deputy Managing Director, is responsible for the development, operation, and maintenance of Nepal's high-voltage transmission infrastructure ranging from 66 kV to 400 kV. Its primary role is to connect power generation sources to distribution networks, ensuring a reliable and efficient supply of electricity. This includes the planning and construction of new transmission lines and substations, as well as the upgrading of existing infrastructure to meet the growing energy demand.

The Directorate is structured into four specialized departments: the High Voltage Grid Development Department (HVGDD), Medium Voltage Grid Development Department (MVGDD), Power System Operation Department (PSOD), and Grid Operation Department (GOD). In addition, the Nepal-India Electricity Transmission and Trade Project (NIETTP) functions as a department-level project under its leadership. The directorate is tasked with reducing system outages, maintaining high-quality power supply, and implementing development plans aligned with national energy strategies.

A critical function of the Directorate is operating the Integrated Nepal Power System (INPS) in synchronous mode with the Indian grid to enhance system stability and reliability. It also facilitates cross-border electricity trade, with the 400 kV Dhalkebar–Muzaffarpur transmission line serving as a major milestone in Nepal-India power exchange. Through these efforts, the Directorate plays a key role in strengthening regional energy cooperation and ensuring long-term energy security for Nepal.

Recently Completed Projects

1. Chilime-Trishuli 220 kV Transmission Line Project

The Chilime–Trishuli 220 kV Transmission Line Project was launched to evacuate electricity generated by several hydropower plants in the Upper Trishuli Valley, including those developed by Chilime Hydropower Company (like Upper Sanjen, Lower Sanjen, Rasuwagadhi, and Sanjen Khola) and other IPPs. Funded by KfW, EIB, EU, and the Government of Nepal, a contract was signed in late 2017 with China's PINGGAO GROUP for constructing two substations (Chilime Hub GIS and Trishuli 3B Hub) and the associated transmission line, with a combined cost exceeding USD 13 million and NPR 1.34 billion.

The project includes 28 km, 220 kV transmission line—20 km double-circuit and 8 km four-circuit—comprising 76 towers and using twin Bison ACSR conductors. It connects the Chilime Hub GIS Substation (Thambuchet, Rasuwa) to Trishuli 3B Hub and features a 2x160 MVA 220/132 kV transformer setup and an additional 50 MVA transformer for further distribution. The transmission line was energized on November 6, 2024, enabling the transmission of about 246 MW of electricity from the connected power projects.

Chilime Hub GIS SS day view.

2. Koshi Corridor 220 kV Transmission Line Project (Basantapur-Dhungesanghu 220 kV Section)

The Koshi Corridor 220 kV Transmission Line Project is designed to evacuate electricity from hydropower projects in the Arun and Tamor river basins across five districts in Koshi Province, Nepal. It also aims to strengthen eastern Nepal's transmission network. Funded mainly by India's EXIM Bank under a USD 250 million Line of Credit (with USD 90 million allocated to this project), the remainder is co-funded by the Government of Nepal and NEA. M/s WAPCOS Ltd. (India) serves as the project consultant.

The project was executed in four packages. **Package KC1** involved constructing 107 km 220 kV double-circuit line from Tumlingtar to Inaruwa via Baneshwar and Basantapur, using twin and quad ACSR Moose conductors. Kalpataru Projects International completed the work despite COVID-19 and right-of-way delays, and the line was energized in August 2022. **Package KC2** included building three 220 kV AIS substations at Tumlingtar, Baneshwar, and Basantapur, and expanding the Inaruwa Substation. These were commissioned between August 2022 and December 2023 under a contract with Larsen & Toubro Ltd.

Package KC3 covered the 35 km 220 kV line from Dhungesanghu (Taplejung) to Basantapur and the 132/33 kV AIS Substation at Dhungesanghu, which includes two banks of 15 MVA transformers (seven 5 MVA single-phase units). Towers were designed for twin ACSR Moose conductors, with single-circuit stringing (second circuit planned in KC4). Awarded to KEC International Ltd. in June 2018 for USD 21.410 million, this package faced remote-access difficulties, severe earthworks, and forest-clearance hurdles. By April 2024, all 127 towers were erected and the first circuit strung—evacuating 73 MW from Sanima Middle Tamor HEP at 220 kV. The Dhungesanghu substation, later completed under KC4, was commissioned on July 6, 2025.

Package KC4 comprised second-circuit stringing of the Basantapur–Dhungesanghu line and construction of four new 220 kV line bays plus two tie bays at Basantapur Substation. Awarded to Nepal Hydro & Electric Limited in November 2022 (NPR 660.8 million), all design, supply, and installation works are complete. The transmission line section was commissioned on June 7, 2025; three bay extensions at Basantapur on April 10, 2024, and the remaining three on July 10, 2025.

KC-3 Dhungesanghu Substation

KC-3: Transmission Line Stretch from Basantapur to Dhugesangu Section

3. Dhalkebar-Loharpatii 132 kV TLP

The project aims to enhance the power supply in the region by constructing 132 kV Double Circuit Transmission Line from Dhalkebar to Loharpatti and a 132/33/11 kV Substation at Loharpatti. This infrastructure will enable reliable power delivery to the Mahottari and Dhanusha Districts, improving power quality. Upon completion, residents and businesses will experience a more stable and efficient power supply, with reduced system losses, leading to a more robust and sustainable electricity distribution network.

The scope of the project includes the construction of 20 km long 132 kV double circuit transmission line with ACSR Cardinal Conductor from the existing Dhalkebar substation to Loharpatti with 132/33 kV, 2*30 MVA and 132/11 kV, 22.5 MVA substation at Loharpatti. The estimated cost of the project is NPR 1125 million and is jointly funded by the GoN and NEA. The project was started in February 2021 and completed in December 2024.

The line was energized and became fully operational on August 13, 2024, significantly enhancing the region's power infrastructure. Electricity is now efficiently distributed from Loharpatti to three major substations—Jaleshwar, Aurahi, and Paraul—via 33 kV feeders. Additionally, three 11 kV feeders provide stable local supply to surrounding communities, further boosting reliability and supporting growing local energy demands.

Loharpatti Substation

4. Malekhu 132 kV Substation Expansion Project

The Malekhu Switching Station Expansion Project in Dhading District aims to improve the reliability of the existing distribution network by enhancing the capacity of the 132 kV Malekhu switching station. The project plays a key role in stabilizing and strengthening power supply in the region by reducing interruptions and improving voltage levels.

The project includes the installation of 2×30 MVA power transformers at Malekhu and the expansion of 33 kV line bays at the existing Jahare and Dhading Besi substations. With an estimated cost of NPR 290 million, the project is jointly financed by the Government of Nepal and NEA. It was initiated in fiscal year 2078/079 and completed on July 12, 2025.

By mid-July 2025, both power transformers were successfully charged—one on June 15 (now supplying the station transformer), and the second on July 12 (currently in no-load condition). The Malekhu–Dhading and Salyantar 33 kV lines are in the testing phase under the Distribution and Consumer Service Directorate. While the system is operational, some minor civil and electrical works remain to be finalized by the contractor.

Malekhu Substation

5. 132 kV Transmission Line Upgradation Project

The objective of this project is to improve reliability, voltage profile, and quality of supply and enhance the transmission line capacity by upgrading the conductor of existing 132 kV transmission lines i.e. New Butwal –Sunwal-Butwal (Package A), Damauli Bharatpur (Package B) and Kushaha-Inaruwa-Duhabi (Package C).

The scope of project in the Packages A and C includes the replacement of 25 and 28 km ACSR Bear conductors with their equivalent High Temperature Low Sag (HTLS) conductors respectively. Similarly, the scope of the project in Package B includes the replacement of the

43 km ACSR Wolf conductor with its equivalent High-Temperature Low Sag (HTLS) conductor. The estimated cost of the project is NPR 983.5 million and jointly funded by the GoN and NEA. This project was initiated in FY 2080/081 and completed on June 2025.

As of July 2025, all of the above conductor upgradation works have been recently completed and put into operation with higher transmission loading.

I. Medium Voltage Grid Development Department

The Medium Voltage Grid Development Department, led by a Director, oversees the planning, construction, supervision, and monitoring of new transmission line and substation projects up to 132 kV.

Projects under Construction

1. Burtibang- Paudi Amrai- Tamghas- Sandhikharka- Gorusinghe 132 kV Transmission Line Project

The project aims to strengthen power infrastructure across the districts of Kapilvastu, Arghakhanchi, Gulmi, and Baglung. By extending transmission coverage into these hilly regions, the project aims to improve power supply reliability, reduce frequent outages caused by long radial distribution lines, and minimize technical losses. Additionally, it will support the evacuation of power from multiple proposed hydropower projects in the area. With an estimated cost of NPR 4.76 billion, the project is jointly funded by the Government of Nepal (GoN) and the Nepal Electricity Authority (NEA), and was initiated in fiscal year 2065/066 (2008/09). Its completion is scheduled for fiscal year 2082/83 (2024/25).

The project scope includes the construction of 85.2 km of 132 kV double-circuit transmission line using ACSR Bear conductor, along with the establishment of five substations. These substations—each with 132/33 kV, 30 MVA and 33/11 kV, 16 MVA capacity—are located in Motipur (Kapilvastu), Sandhikharka (Arghakhanchi), Tamghas and Paudi-Amarai (Gulmi), and Burtibang (Baglung).

Major milestones have already been achieved: the Motipur substation was energized on 2078/08/09, followed by the Motipur–Sandhikharka transmission line on 2078/12/11, and the Sandhikharka substation on 2078/12/12. Similarly, the Tamghas substation was charged on 2078/03/05, and the Sandhikharka–Tamghas line on 2081/03/03.Further progress includes the energization of the Burtibang substation from the LV side on 2081/09/21, and the Paudi-Amarai substation on 2082/01/11, also from the LV side.

Currently, construction of the 32.8 km (65.6 circuit km) transmission line of the Paudi-Amarai Burtibang section is going on. All 134 towers have already been erected. Only the stringing works are left, as the forest entry permission is still pending for the RoW clearance.

Tamghas 132/33/11 kV Substation

2. Kushaha (Inaruwa) - Biratnagar 132 kV Transmission Line Project

The Biratnagar Transmission Line and Substation Project is designed to improve power reliability in Morang and Sunsari districts by reducing overload at the Duhabi, Rani, and Tankisinwari substations. It includes the construction of a 22.5 km, 132 kV double-circuit transmission line from the Bhokraha Substation to a new substation in Biratnagar, equipped with 2×63 MVA and 1×16 MVA transformers. As of July 2025, 80 towers have been erected and 22.2 km of stringing completed, with minor work pending due to forest clearance.

Substation work is progressing steadily—staff quarters are complete, Rani and Tankisinwari foundations are mostly done, and the Biratnagar switchyard and control building are nearing completion. Key equipment has been delivered and about 25% of erection work is done. The USD 19 million project is targeted for completion by fiscal year 2082/83, aiming to support growing power demand and enhance distribution reliability in the region.

3. Balefi-Barhabise Corridor 132 kV Transmission Line Project

This project is intended to evacuate electricity generated by Independent Power Producers (IPPs) in the region. It includes constructing a 20 km double-circuit transmission line from Pangtan to Bahrabise using ACSR Cardinal conductor. Funded by the Government of Nepal with an estimated cost of NPR 546.69 million, the project is contracted to M/S Sigma Con. Pvt. Ltd. and is scheduled for completion by fiscal year 2082/83.

As of July 2025, key preparatory activities—including surveys, engineering, soil testing, and tower designs—are complete. Out of 63 towers, 59 foundations are done and 43 towers have been erected. Materials are largely delivered, and 3 circuit kilometers have been strung. However, due to adjustments in tree removal within the Right of Way, a Revised Initial Environmental Examination (RIEE) was required and has now been approved. Final clearance is pending before suspended stringing work can fully resume.

4. Kohalpur-Surkhet- Dailekh 132 kV Transmission Line Project

This aims to improve the reliability of power supply in Surkhet, Dailekh, and Jajarkot districts, which currently suffer from low voltage and frequent outages due to overextended 33 kV and 11 kV lines. The project also supports future demand growth and facilitates power evacuation from regional hydropower plants. It involves building a 52 km 132 kV double-circuit line from Kohalpur to Surkhet, and 32 km line from Surkhet to Dailekh, with substation bay extensions at Kohalpur and Surkhet and a new 132/33/11 kV substation in Dailekh.

By July 2025, significant progress had been made: 156 of 162 tower foundations and 150 towers have been completed on the Kohalpur–Surkhet line, with 40 km of stringing finished. Land acquisition and tree clearance are largely done, though RoW issues remain in some areas. For the Surkhet–Dailekh section, 44 of 101 foundations are complete and most materials have been delivered. Substation work is also advancing—Kohalpur bay extensions are nearly ready for commissioning, and at Dailekh, major civil structures are complete, equipment approvals secured, and switchyard foundation work is set to begin.

5. Dhalkebar – Balganga 132 kV Transmission Line Project

This project is being developed to improve voltage levels and ensure a reliable power supply in Dhanusha district. With an estimated cost of NPR 2,136 million, it is jointly funded by the Government of Nepal and NEA. The project includes a 24 km, 132 kV double-circuit transmission line using ACSR Cardinal conductor and a 132/33 kV, 2×63 MVA substation at Balganga in Hansapur Municipality. Once complete, it will supply power to six 33/11 kV substations in the region, supporting both residential and commercial needs.

As of July 2025, 75 out of 77 tower foundations have been completed and 73 towers erected. All line materials have been delivered. At the substation site, foundation works for gantries and transformers are ongoing, and the ground floor slabs of the control room and staff quarters are complete. Brickwork and structural progress continue, and most substation equipment is under production, with some already delivered.

The project is on track for completion by fiscal year 2082/83 (2026/27 AD).

6. Kaligandaki-Ridi 132 kV Transmission Line Project

The project is designed to enhance electricity supply reliability in Palpa and Gulmi districts and provide power to the upcoming CG Cement facility. Initiated in fiscal year 2075/76 (2018/19) with an estimated cost of NPR 1,450 million, it is jointly funded by the Government of Nepal and NEA. The project includes a 22.45 km 132 kV double-circuit transmission line using ACSR BEAR conductor, a 132/33/11 kV substation at Kuseni, Palpa, and a 132 kV GIS bay extension at Kaligandaki 'A' Hydroelectric Plant.

As of July 2025, 63 out of 70 tower foundations have been completed, 55 towers erected, and 2.88 km of stringing finished. All major line materials are on-site. At the Ridi Substation, major civil structures and equipment supply are nearly complete, and Substation Automation System (SAS) components have been factory tested and dispatched. At Kaligandaki HEP, the GIS bay extension is progressing, with XLPE cable laying completed and control cabling underway. The entire system—including transmission line, substation, and GIS bay—is targeted for commissioning by fiscal year 2082/83 (2026/27 AD).

7. Bhumahi – Hakui 132 kV Transmission Line Project

The project aims to support rising industrial power demand in Nawalparasi (Susta Paschim) by enhancing transmission capacity, reliability, and voltage stability. The project involves constructing a 14.36 km, 132 kV double-circuit transmission line from Sunwal Substation to a new Hakui Substation, which will feature 2×100 MVA transformers, seven 33 kV feeders, and capacitor banks to improve network performance.

As of July 2025, major substation structures—including the control building, switchyard, transformer foundations, and guard house—are complete, and both transformers have been installed. Work continues on the 33 kV switchyard and cable trenches. For the transmission line, foundations for 14 of 47 towers are finished, with cadastral surveys and land acquisition underway. Forest land use approval has been granted, and tree-cutting permission is being processed.

Hakui Substation

8. Amarpur-Dhungesaghu 132kV Transmission Line Project

The Amarpur Dhungesaghu 132 kV Transmission Line Project is a significant infrastructure initiative jointly funded by the GoN and the Nepal Electricity Authority (NEA). This transmission line is crucial for diverting load from the Kabeli Corridor, which is anticipated to be overloaded soon, to the Koshi Corridor, thereby enhancing the reliability and stability of the power system. This project shall be a link for the evacuation of power effectively from the growing number of IPPs in the Kabeli River Basin.

The project aims to construct a 19.13 km long double circuit transmission line, which will interconnect the existing 132 kV Kabeli Corridor and the under-construction 220 kV Koshi Corridor. The project was initiated in FY 2018/19 and is expected to be completed by the end of FY 2025/26. The estimated cost of the project is NPR 1,042 million and is jointly funded by the GoN and NEA.

The contract agreement for the transmission line works is signed with Cosmic Electrical Limited on 2022 October. As of July 2025, out of 67 Tower locations, 35 tower pad foundations and 2 erections have been completed. Additionally, the contract for construction of two bays each at Amarpur and Dhungesanghu Substation and 33/11 kV Substation at Dhungesanghu is signed with A.R.T Construction on 2025 March.

First Erected Tower

Bay Civil Works at Amarpur S/S

9. New Khimti-Lamosanghu-Kathamandu Transmission Line Up-gradation Project

The objective of this project is to increase the existing power supply system of Kathmandu Valley by upgrading the conductor of existing 132 kV transmission lines from New Khimti to Bhaktapur via Lamosanghu 132 kV substation. It also helps to supply quality, reliable, and uninterrupted power supply in Kathmandu Valley.

The scope of the project in the first phase is to upgrade existing 220/132 kV, 100 MVA Power Transformer to 200 MVA Auto Transformer at New Khimti Substation. The estimated cost of the project is NPR 660 million and is jointly funded by the GoN and NEA. This project was initiated in FY 2080/081 and is expected to be completed by the end of year 2027. In the second phase, the replaced 100 MVA Power Transformer and associated work will be done in the unoccupied land of the same substation in future.

As of July 2025, Contract Aggreement has been completed and design drawing review in is in progress. Similarly, the draft report with cost estimate and bidding document for the second phase is in final stage via consultant.

10. Surkhet Substation Project

This project aims to enhance power supply reliability and capacity in Surkhet and Karnali Province. With an estimated cost of NPR 750 million, the project is jointly funded by the Government of Nepal and NEA. It involves constructing a substation with 2×30 MVA (132/33 kV) and 1×24 MVA (33/11 kV) transformers, along with the installation of four 33 kV and four 11 kV feeders to improve electricity distribution. The contract was awarded to Nepal Hydro & Electric Limited, with work starting in fiscal year 2079/80 and scheduled for completion by September 2025.

By July 2025, all major electrical installations have been completed, with only testing, commissioning, firefighting systems, communication setups, and some civil works like road construction remaining. The project is near completion and expected to significantly strengthen the regional power infrastructure.

11. Thankot – Chapagaon – Bhaktapur 132 kV Transmission Line Project

The project aims to complete the 132 kV ring main network within the Kathmandu Valley, aiming to enhance transmission capacity, improve power quality and reliability, and reduce line losses in the region. The estimated project cost is USD 23 million and is funded from the GoN and NEA.

So far, approximately 6 km of transmission line in Kathmandu district and 4 km in Bhaktapur district have been completed. However, the construction of the remaining 18 km in Lalitpur district has been halted due to local protests, with demands for either full Right of Way (RoW) compensation or the complete relocation of the transmission line. As a result, the previous construction contract was terminated. NEA is engaging in dialogue with local stakeholders and authorities in an effort to resume and complete the remaining work, although no tangible progress has been made yet.

In preparation for charging the Chovar Substation via the Matatirtha–Chovar line section, two 132 kV line bay foundations have been completed. All necessary line bay equipment was delivered by the end of Ashad, and the Matatirtha–Chovar section is expected to be energized within the next three months.

132 kV bay foundation at Matatirtha

12. Prasauni Birgunj 132 kV Underground Electricity Transmission Line Project

The Prasauni–Birgunj 132 kV Underground Transmission Line Project was launched by NEA to meet the rising electricity demand driven by rapid industrial growth in the Birgunj area. The project features a new 132/33 kV AIS substation at Prasauni with a Loop-In-Loop-Out (LILO) connection to the existing Parwanipur–Raxaul line, a 145 kV XLPE copper underground cable linking Prasauni and Birgunj, and a new 132/66 kV GIS substation at Birgunj interconnected with the existing substation to boost system reliability. The contract was awarded to M/s COVEC-CREGC-KALIKA JV for design and construction.

By July 2025, major works are well advanced: Prasauni substation equipment installation and switchyard erection are complete with ongoing testing; buildings and civil infrastructure are finished or in progress. The underground transmission line has been fully laid with trenching, pipe laying, cable installation, and restoration completed. At Birgunj, the GIS building and key equipment are installed, with testing and civil works underway. The project is on track for completion by fiscal year 2082/83 (2025/26) and will significantly strengthen power supply capacity and reliability in the industrial corridor.

Prasauni Substation

13. Lalbandi-Salimpur 132 kV Transmission Line Project

This project aims to enhance electricity supply reliability by linking northern Terai high-voltage corridors to southern areas. The project includes constructing a 20 km double-circuit 132 kV

transmission line using ACSR Bear conductor from Nawalpur to a new Chainpura substation. The substation will have 2×30 MVA (132/33 kV) and 1×24 MVA (33/11 kV) transformers and supply power to nearby 33/11 kV substations such as Dumariya, Malangwa, Barathawa, and Haripurwa. The project is funded by the Government of Nepal with an estimated cost of NPR 1,258.71 million.

As of July 2025, most civil works for the substation buildings and equipment structures are nearly complete, with only finishing tasks remaining. Key components like transformers, disconnecting switches, conductors, and circuit breakers have been delivered. For the transmission line, 62 of 66 tower foundations are finished, and 45 towers erected. Land acquisition and compensation processes are mostly complete. The project is progressing well and is expected to be finished by May 2026.

14. Kushma - Lower Modi – New Modi 132 kV Transmission Line Project

The Kusma–New Modi 132 kV Transmission Line Project in Parbat District aims to improve power evacuation and grid reliability within the Kaligandaki Corridor by upgrading from a temporary single-circuit setup to a full double-circuit ring network. This upgrade addresses power flow bottlenecks affecting hydropower projects in Parbat and Myagdi districts. The project scope includes stringing 6.2 km second circuit on the existing Kusma-Lower Modi line, constructing new 8.6 km double-circuit transmission line, and expanding two 132 kV bays at New Modi Substation.

Awarded to M/s Cosmic Electrical Limited in November 2023 with a contract value of NPR 349.2 million, the project started in late 2023 and has a 21-month timeline. By July 2025, surveys, soil investigations, and three tower foundations are complete, and the two bay expansions and second-circuit stringing on the existing line have been finished. Most equipment is supplied, land acquisition was finalized in April 2025, and tree surveys are done, though a revised environmental review may be needed. Construction of the remaining 8.5 km transmission line is still pending.

New Modi 132 kV Substation (with two Bay expansion & Foundation work)

15. Nepalgunj-Nanpara Cross-Border 132 kV Transmission Line Project

This project aims to enhance power exchange between Nepal and India by replacing the existing inefficient 33 kV feeder with a new 132 kV double-circuit line—32 km on the Indian side and 17 km on the Nepali side—connecting to the New Nepalgunj 132/33/11 kV substation. This upgrade will improve electricity reliability, reduce technical losses, and support growing industrial, domestic, and irrigation demands

in Nepalgunj and nearby areas like Kohalpur and Gulariya. The project began in fiscal year 2079/80, with the Nepali portion contracted to M/s Mudbhary & Joshi Construction Pvt. Ltd. in February 2024.

By July 2025, essential preparatory works including surveys, tower spotting, and design approvals have been completed. Major equipment like conductors and bay extension components are already delivered to the site, setting the stage for construction. The project is on track for completion by May 2026 and is expected to significantly boost cross-border energy cooperation, grid stability, and regional economic growth.

16. Godak-Soyak 132 kV Transmission Line Project

The project is conceptualized to make the LILO arrangement in the second circuit of the Damak-Phidim transmission line and to connect with the existing Godak Substation. The purpose of the project is to improve the grid stability. The project cost is estimated to be NPR 553.4 million and is jointly funded by the GoN and NEA.

The scope of the project includes the construction of a 6.61 km long double circuit 132 kV transmission line with an ACSR Bear conductor. A contract agreement has been signed with Vector Triple S. JV on 2023 October. As of July 2025, out of total 26 towers, foundation works of 14 tower pads have been completed so far. The erection work has not started yet. The preliminary report for Land Acquisiton has been submitted to the District Administration Office.

17. Bafikot-Khungri 132 kV Transmission Line Project

The project aims to strengthen power supply and facilitate power evacuation from Independent Power Producers (IPPs) in Rolpa and Rukum (east and west) districts, while integrating these areas into the Interconnected Nepal Power System (INPS). It involves constructing a 75 km long, 132 kV double-circuit transmission line from Khungri Substation (Rolpa) to Uttarganga Substation Hub, Bafikot (Rukum), along with a 132/33/11 kV, 16/20 MVA substation at Ghartigaun, Rolpa, serving multiple municipalities and villages across Rolpa and Rukum west.

Contracted to SIGMA CON.-KRRTPPL JV, the project began in fiscal year 2076/77 with an estimated cost of USD 35 million. Currently, the check survey and soil investigations are underway, and pre-design activities are in progress. The project is planned for completion by fiscal year 2084/85, aiming to significantly improve power reliability and connectivity in the region.

II. High Voltage Grid Development Department

This department is headed by a Director and is responsible for planning, constructing, supervising, and monitoring new transmission line and substation projects of 220 kV and above voltage level.

A summary of the under construction projects being executed by this department is presented below:

Projects under Construction

1. Lekhnath-Damauli 220 kV Transmission Line Project

The project aims to enhance power evacuation capacity in Nepal's Gandaki region by constructing a 45 km, 220 kV double-circuit transmission line using MOOSE ACSR conductor, connecting Lekhnath Substation (Pokhara) to a new Damauli Substation (Byas). It also includes building two high-voltage GIS substations: an upgraded 220/132 kV substation at Lekhnath and a new 220/132 kV, 132/33 kV, and 33/11 kV substation at Damauli. The project incorporates Loop-in-Loop-out (LILO) connections to integrate existing hydropower and transmission lines, thereby strengthening grid connectivity. The total estimated cost is USD 90 million, jointly funded by the Government of Nepal and KfW, with a completion target in fiscal year 2084/85.

By July 2025, significant progress has been made on enabling works including access roads, a river bridge, and substation buildings. The transmission line package led by KEC International Ltd. has completed most design and engineering, with soil investigations and surveys underway and major materials delivered. Land acquisition and forest clearance processes are ongoing. The substation package,

contracted to Siemens Limited, began surveys and has a 24-month timeline. Overall, the project is on track to greatly improve power transmission and evacuation in the Gandaki region.

2. Tumlingtar-Sitalpati 220 kV Transmission Line Project

The Tumlingtar–Sitalpati 220 kV Transmission Line Project aims to extend Nepal's Integrated National Power System by connecting Tumlingtar Substation to the new Sitalpati Substation. Sitalpati will serve as a key hub to evacuate power from hydropower projects in the Arun River basin and collect electricity from local Independent Power Producers (IPPs), forwarding it through Tumlingtar to the Koshi Corridor network. The project, fully funded by the Government of Nepal with an estimated cost of NPR 4,482 million, began in August 2022 and is planned for completion by April 2026.

The project includes constructing about 14 km of 220 kV double-circuit transmission line, a 220/132/33/11 kV AIS-GIS hybrid substation at Sitalpati, and two 220 kV line bay extensions at Tumlingtar. Contracted to Kalpataru Projects International Limited (India), as of mid-2025, 32 of 39 towers have been erected with foundations complete, but further tower work and conductor stringing are delayed due to pending forest clearances. Substation civil works are progressing, with key buildings constructed and much equipment foundation work finished. With materials largely on-site and engineering nearing completion, the project is moving steadily toward its scheduled completion, pending resolution of environmental approvals.

Tower AP11/0 to AP17/0

3. Trishuli 3B – Ratmate – Galchhi 220 kV Transmission Line Project

The Trishuli 3B–Ratmate–Galchhi 220 kV Transmission Line Project is designed to strengthen electricity transmission to Kathmandu Valley by establishing two key line segments: an 8.5 km four-circuit Galchhi–Ratmate line and a 24 km double-circuit Trishuli 3B–Ratmate line, both using Twin MOOSE ACSR conductors. The Galchhi–Ratmate line will provide a Loop-in-Loop-out connection to the existing Marsyangdi–Kathmandu 220 kV line, enhancing redundancy and supply reliability to Kathmandu. Meanwhile, the Trishuli 3B–Ratmate line will evacuate power from the Trishuli corridor into the central grid. Both segments include bay extensions at key substations to integrate the new lines, collectively creating a more robust transmission corridor from hydropower zones to major load centers.

The Galchhi–Ratmate section contract was awarded in May 2024 to M/s SIGMA CON.–KRRTPPL JV for USD 9.23 million, with Chilime Engineering and Services Ltd. supervising construction. By July 2025, preparatory work like check surveys, tower scheduling, and design approvals are near completion. For the Trishuli

3B–Ratmate section, survey licensing is done, and the transmission license application has been submitted, with the Initial Environmental Examination currently being updated to meet regulatory requirements before construction proceeds.

III. Nepal-India Electricity Transmission and Trade Project (NIETTP)

Nepal-India The Nepal-India Electricity Transmission and Trade Project (NIETTP), funded by the World Bank, was launched to establish a high-voltage cross-border transmission capacity of about 2,000 MW, facilitating power exchange with India and improving Nepal's electricity supply reliability. Under NIETTP's additional funding, construction of the Hetauda-Bharatpur-Bardaghat 220 kV transmission lines and 132 kV substations at Hetauda, Bharatpur, and Bardaghat has been successfully completed.

The project also supported the preparation of Nepal's Transmission System Master Plan, which is currently being implemented by the Nepal Electricity Authority (NEA). All substations built under this initiative use Air Insulated Switchgear (AIS) with double main and transfer bus bar schemes for 220 kV and double main bus bar schemes for 132 kV, ensuring robust and reliable power system operations.

Projects under Construction

1. Hetauda-Dhalkebar-Inaruwa 400 kV Transmission Line Project

The Hetauda-Dhalkebar-Inaruwa 400 kV Transmission Line Project aims to establish a high-capacity cross-border power transmission link of about 2,000 MW with India, enhancing Nepal's power supply reliability and evacuation capability. Funded by the World Bank (initially), Government of Nepal (GoN), and Nepal Electricity Authority (NEA), the project began in 2012 and is expected to be completed by December 2025. It includes construction of approximately 288 km of 400 kV double-circuit transmission lines, and three major substations at Hetauda, Dhalkebar, and Inaruwa with advanced Air Insulated Switchgear (AIS) systems and IEC 61850-based automation for efficient control and protection.

As of July 2025, 773 out of 792 tower foundations are complete, with 770 towers erected and over 534 circuit kilometers of conductor stringing done. The Dhalkebar-Inaruwa section is fully charged since June 2024, marking NEA's first 400 kV line with a 4,000 MW capacity. Despite some delays due to forest clearance, land disputes, and contractor issues in substation works, significant progress includes commissioning of 220/132 kV substations at Dhalkebar (950 MVA), Hetauda (330 MVA), and Inaruwa (446 MVA) at 220 kV voltage level. Remaining civil works at substations are targeted for completion by late 2025, further strengthening Nepal's national grid and cross-border power exchange.

400 kV Tower at Koshi River

IV. Power System Operation Department (PSOD)

The Power System Operation Department (PSOD), also known as the Load Dispatch Centre (LDC), operates under the Transmission Directorate of Nepal Electricity Authority. It is the central body responsible for the real-time operation and control of the Integrated Nepalese Power System (INPS), ensuring continuous, reliable, and high-quality power supply across the country. PSOD oversees the balanced operation of all generation sources—NEA-owned, subsidiaries, IPPs, and solar—based on system needs, standard procedures, and agreements.

In addition to system operation, PSOD manages domestic energy scheduling and cross-border power exchanges, playing a key role in Nepal's electricity import-export activities. It also ensures effective communication between grid users and with the National Load Dispatch Centre (NLDC) of India for facilitating cross-border power trading.

The main functions of PSOD:

- LDC constantly monitors, supervises and controls the national grid and cross-border transmission lines to ensure a continuous and quality power supply to its consumers via robust Optical Ground Wire (OPGW) communication network across the country
- LDC is responsible for real-time operations related to grid supervision and the dispatch of electricity within Nepal and to India through cross-border links, ensuring secure and economic operation of the national grid as per the prevailing Grid Code and standards.
- It plans, schedules, coordinates, and executes the shutdown of grid elements and generators as required.
- It plans, schedules and executes the import and export of power between the neighboring countries under various modalities such as Government-to-Government, Power Exchange Corporation (PEC) mechanism, Power Exchange Markets, NEA to Haryana, NEA to Bangladesh, free power from Tanakpur, etc. It is responsible for bidding in the power exchange market of India via Day Ahead Market (DAM) and Real Time Market (RTM) platforms by optimally forecasting surplus and deficit.
- LDC restores the normal functioning of the power system as quickly as possible after the occurrence of faults or unforeseen events and incidents.
- It devises emergency network plans in case of disasters and natural calamities.
- It advises necessary actions for better system protection coordination and system improvements.

To ensure effective and reliable supervision of Nepal's power system, the Load Dispatch Center (LDC) uses the Siemens Spectrum Power 7 SCADA/EMS system. This advanced system allows real-time monitoring and remote control of substations and power plants nationwide, enabling centralized management of key grid parameters like voltage, frequency, and power flow. Its SCADA features include remote equipment operation, alarm management, historical data logging, and a user-friendly interface for graphical system visualization and quick decision-making.

NEA has set up an Emergency Control Center (ECC) in Hetauda as a backup to the Load Dispatch Center (LDC) in Kathmandu, ensuring power system continuity during emergencies. A successful full-day operational drill was conducted on August 8, 2025, with ECC taking primary control. Such drills will continue periodically. Additionally, LDC is connected to India's National LDC via an ICCP link and hotline, enabling real-time data exchange and coordination for cross-border power operations with India and Bangladesh.

The major highlights of this fiscal year are presented below:

1	Annual System Peak Demand	2901 MW	2082-03-17
2	Annual System Energy Demand	16446.68 GWh	
3	Annual National Peak Demand	2409 MW	2082-02-27
4	Annual National Energy Demand	14067 GWh	
5	Annual Load Factor	66.89 %	
6	Total Exported Energy(Annual)	2380 GWh	
7	The Maximum Exported Energy in a Single Day	21.12 GWh	2081-06-01
8	Per Capita Electricity Consumption	465 kWh	

**Provisional figures based on PSOD data*

The key accomplishments of PSOD in this Fiscal Year

- Cross Border Electricity Trade

  Nepal engages in power trade with India through bilateral contracts and by actively participating in the Indian Energy Exchange (IEX) markets—Day-Ahead Market (DAM) and Real-Time Market (RTM)—with NVVN as the nodal agency. Power is also imported via the PEC mechanism. In a significant development, Nepal began exporting 40 MW of electricity to Bangladesh around the clock from June 15, 2025. The Energy Management Division, in coordination with system operators, strategically bids daily on IEX to optimize power purchases and sales based on demand, plant availability, and market prices, including using cheaper off-peak power to fill reservoirs. As of FY 81/82, approximately 2380 MU (million units) of energy have been exported to India, generating substantial revenue and positioning Nepal as a net energy exporter.

- Frequency and voltage control:

  Frequency and voltage are key indicators of power quality, and during this fiscal year, Nepal's power system frequency was well-maintained around 50 Hz. Voltage levels at most substations remained within permissible limits—±10% up to 132 kV and ±5% for 220 kV and above—as per Nepal Electricity Grid Code. However, during summer, substations in parts of the Central Terai, Mid-Western, and Eastern regions experienced occasional undervoltage. While capacitor banks and reactors installed by the Grid Operation Department helped mitigate the issue, they proved insufficient at times. With growing generation in northern corridors, the need for additional and upgraded voltage control equipment, particularly reactors, has become more critical.

- Dispatching and scheduling:

  Effective short-term demand forecasting, daily energy scheduling, and efficient generation dispatch have enabled the Load Dispatch Center (LDC) to balance supply and demand within the Integrated Nepalese Power System (INPS), ensuring economic power dispatch while maintaining system voltage and frequency within standard limits. Strategic use of the Kulekhani reservoir allowed for optimal generation without compromising current water levels. Additionally, the generation from NEA's ROR, PROR plants, and Independent Power Producers (IPPs) was efficiently utilized, contributing to the disciplined and reliable operation of the power system throughout the fiscal year.

- Shutdown coordination:

  As the central authority for coordinating shutdown events, the Load Dispatch Center (LDC) managed all planned, scheduled, emergency, and breakdown-related shutdowns during the fiscal year. Major shutdowns of power plants and transmission lines were carried out smoothly in close coordination with various grid divisions, ensuring system stability. Both routine maintenance and emergency shutdowns were handled efficiently, including those of NEA's and IPPs' generation units. The skillful handling of the power system by the operators during the shutdown period has made it possible to supply power with minimum interruption.

- System restoration and operation under adverse conditions:

  The vigilant monitoring of the system and the prompt decision of the system operator during abnormal situations and fault conditions have helped significantly in controlling the tripping in this fiscal year. The number of partial system tripping events in this fiscal year is 71 with the total partial system interruption duration of 8 hours and 11 minutes. The partial system tripping in most cases was caused mainly due to transmission line constraints prevailing in many parts of the country at present without sufficient contingency arrangement in the

system. However, the system restoration time after each tripping event has been drastically minimized with the proficient actions taken by the system operators. This has also indicated that the Nepalese power system is now evolving towards the next level of intricacy with the rapidly increased generation, continuous load growth and addition of more elements, thereby, triggering the necessity of the automation and digital surveillance for instant action and prevention of undesirable events and interruptions.

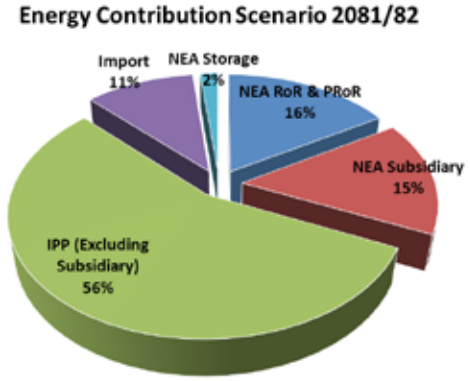
- SCADA and communication facilities:

  NEA utilizes its nationwide Optical Ground Wire (OPGW) network for reliable data and voice communication between substations, power plants, and the Load Dispatch Center (LDC), enabling efficient system operation and VoIP-based hotline connectivity. This fiber infrastructure not only supports internal operations but also generates revenue through leasing to telecom companies and ISPs. In FY 2081/082, 23 IPPs and 12 NEA substations were integrated into the SCADA system as per the "SCADA Integration Directives, 2081." Additionally, LDC aims to build technical capacity to offer consultancy services in SCADA and communication systems, expanding NEA's capabilities and service portfolio.

- Status of Supply and Demand:

  In this fiscal year, the commissioning of 22 new IPP generators added 434.125 MW to the Integrated Nepalese Power System (INPS), including major plants like Rasuwagadhi, Lower Sanjen, and Sanjen Khola. This increase in generation capacity helped meet rising demand, reduced power imports, and enabled significant energy exports during the wet season. National energy and peak demand grew by 11.13% and 8.92% respectively, while energy imports decreased by 8.23%. Imported energy made up only 12.13% of total demand—17.42% less than the previous year—making Nepal a net energy exporter once again.

The contribution of different generations to meet the total annual energy demand of the INPS for the fiscal year 2081/82 is given below.



Energy contribution scenario (2081/82)

III. Challenges

- The rapid augmentation of the generation and load in the system has added many challenges in the system operation with its existing transmission arrangements that are inadequate to evacuate power to load centers. Even if the transmission line expansion is going on at the rapid scale, it is lagging behind in pace. Depending on the season, temperature and precipitation patterns, system scenarios are most likely to vary, thereby affecting various transmission lines, power transformers and their loadings at different times. Matatirtha-Hetauda 132 kV, Marsyangdi-New Bharatpur 132 kV, Duhabi-Damak 132 kV, Dhalkebar-Nawalpur-Chapur 132kV, Bhaktapur-Lamosanghu 132kV and many more lines have to be operated almost in their full capacity continuously during certain periods which have caused the frequent overloading issues and subsequently became the reasons for the partial power interruption at times. In addition to those challenges, transformer capacity constriants at New-Khimti Substation, Hetauda Substation, Syuchatar Substation, Balaju Substation, Parwanipur Substation, New-Butwal Substation etc. are also posing serious restrictions in the power system operation. With the lack of proper

and adequate n-1 contingency arrangements in the system, the power system operation department is constantly facing numerous challenges on a regular basis and this needs to be addressed timely to ensure the quality and reliability of supply to the consumers.

- Automation is now deemed very essential for the power system operation as the network complexity is ever increasing and the manual interventions during the adverse events may not be prompt enough to tackle the varied situations during operation.
- The western region of Nepal continues to face challenges in ensuring smooth power supply due to insufficient generation capacity relative to growing demand. Although some new generators were added this fiscal year, they remain inadequate to meet the region's needs. Transmission constraints prevent surplus power from the eastern region from being efficiently transferred westward, leading to occasional voltage issues and supply difficulties in the west. Rapid generation and transmission upgrades are urgently needed to address these challenges.
- Power evacuation of the newly commissioned IPPs due to various constraints prevailing in the power system network is also one of the biggest challenges faced by LDC.
- The frequent unplanned abrupt emergency and forced outages of power plants during the rainy season and the frequent tripping of transmission lines has created difficulty in the smooth operation of the system, thereby influencing the export-import schedules intermittently as well as providing seamless power supply to its consumers.
- The undeclared fluctuations in the load consumption pattern of the large and bulk power consumers have imposed a major challenge to the system operators to maintain the export-import schedules as well as transmission line loadings and hence burdened NEA with penalty under the Deviation Settlement Mechanism (DSM).
- Data and voice communication from many IPPs and large and key consumers are still not in place causing huge impact on the system operation.
- With the rapid expansion of the power system—including new generators, load centers, and cross-border connections—the current workforce and infrastructure at the Load Dispatch Center (LDC) are becoming insufficient. To effectively manage these growing responsibilities and ensure reliable system operation, both human resources and technical infrastructure need to be appropriately expanded and strengthened.

V. Grid Operation Department

The Grid Operation Department (GOD) of the Transmission Directorate is responsible for ensuring reliable, secure, and high-quality power transmission from remote generation sites to major load centers across Nepal, managing transmission lines and substations from 66 kV up to 400 kV. The department conducts both preventive and breakdown maintenance, works on projects to expand substation capacity, upgrade equipment, provide reactive power support, and rehabilitate the grid to enhance overall performance.

GOD also integrates Independent Power Producers (IPPs) and bulk consumers into the national grid following NEA's Grid Code. It manages seven grid division offices across key locations and two branch offices, playing a vital role in maintaining a stable electricity supply that supports Nepal's development and rising energy needs.

To fulfill its mandate efficiently, the department oversees seven grid division offices located in Kathmandu, Hetauda, Butwal, Duhabi, Pokhara, Attariya, and Dhalkebar, along with two grid branch offices in Khimti and Kohalpur.

A. Major reinforcement/upgradation works performed

During FY 2081/82, the department carried out important transformer reinforcement and upgrade projects across multiple substations to meet rising power demand and reduce voltage drops. These activities included upgrading transformers, adding reactive power compensation, and rehabilitating equipment. Replaced transformers were refurbished and reused at other substations, providing a cost-effective solution to manage load and improve system reliability.

Key achievements included energizing 132/11 kV, 45 MVA transformers at New Bharatpur, Matatirtha, and Chapali substations; installing a 66/11 kV, 22.5 MVA transformer at Kulekhani substation; and commissioning a 132/33 kV, 63 MVA transformer at Dhalkebar substation. These efforts helped reduce power interruptions linked to insufficient substation capacity.

B. Grid Connection Agreement

The Department has successfully signed the Grid Connection Agreement with 48 Independent Power Producers (IPPs) for 2380.47 MW power to meet the future load demand. Among those 23 IPPs will produce total of 1795.47 MW hydro power and remaining 25 IPPs will produce total of 585 MW solar power.

C. Transmission Loss Status

Comparison of Transmission Line Loss of different F/Y.

S. No.	F/Y	Total Import Energy (MWh)	Total Export Energy(MWh)	Transmission Line Loss Energy(MWh)	Transmission Line Loss in Percentage
1	2068/69	3736805.66	3520922.32	215883.34	5.78%
2	2069/70	3772905.51	3574865.1	198040.41	5.25%
3	2070/71	4120153.81	3889823.1	230330.71	5.59%
4	2071/72	4394005.17	4193004.03	201001.14	4.57%
5	2072/73	3097302.02	2934259.90	163042.12	5.26%
6	2073/74	5552927.57	5275058.79	277868.78	5.00%
7	2074/75	6347849.13	5980995.92	366853.21	5.78%
8	2075/76	7005397.48	6700648.12	304749.36	4.35%
9	2076/77	7149391.47	6826833.47	322558.00	4.51%
10	2077/78	8170175.54	7791266.07	378909.47	4.64%
11	2078/79	10111556.74	9659983.88	451572.86	4.47%
12	2079/80	11708172.92	11182998.99	525173.92	4.49%
13	2080/81	13353198.82	12761130.64	592068.18	4.43%
14	2081/82	15007201.1	14408997.69	598203.42	3.99%

D. Projects under Execution

The Grid Operation Department is executing various projects to increase the capacity of the Grid substations to cater to the increasing load demand and to buy spare power transformers necessary for immediate replacement.

DISTRIBUTION AND CONSUMER SERVICES DIRECTORATE

Distribution and Consumer Services Directorate (DCSD), led by the Deputy Managing Director, is responsible for the planning, expansion, operation, maintenance, and rehabilitation of distribution networks, including substations up to the 33 kV voltage level. Additionally, DCSD administers consumer service activities, such as new connections, meter reading, billing, revenue collection, and handling consumer grievances.

Minimizing technical and commercial losses in the distribution network through measures such as infrastructure upgrades, network reconfiguration, transformer optimization, power factor correction, and control of electricity theft, DCSD is also engaged in expanding and upgrading the distribution network to meet growing electricity demand and accommodate new consumer connections. All these activities are conducted in accordance with service standards, tariff regulations, and other policies outlined by the regulatory framework established by national law. Furthermore, DCSD has implemented Advanced Metering Infrastructure (AMI) using innovative technologies in energy metering and billing systems, incorporating smart metering and smart grid technologies. DCSD has also introduced Substation Automation Systems (SAS) in both existing and newly constructed substations. GIS substation has also been introduced in the distribution substation in recent times.

In addition, DCSD is striving to meet the Government of Nepal's goal of providing electricity service to the entire population within the next two years. The organization is making significant investments in distribution infrastructure to enhance reliability and quality while reducing losses. The DCSD is committed to maintaining and upgrading the distribution network to ensure a reliable and quality power supply.

According to the recently implemented Organization and Management Structure, DCSD consists of three central departments: the Planning and Technical Services Department, the Community Rural Electrification Department, and the Smart Meter and Automation Department, each led by the Director. In addition, DCSD provides services to consumers nationwide through its seven Provincial Offices and two Division Offices. The Directorate employs approximately 67.23% of the total staff at NEA. It plays a crucial role in revenue collection to support the planning, expansion, operation, maintenance, and overall growth of NEA.

Vital Performance Highlights

Customer Category	Percent of total consumers (%)	Sales (%)	Revenue (%)
Domestic	91.08%	42.02%	39.05%
Non-Commercial	0.72%	3.07%	4.47%
Commercial	0.77%	7.79%	11.33%
Industrial	1.23%	36.64%	36.52%
Others	6.21%	10.48%	8.62%

In FY 2024/25, the total number of consumers reached to 5,707,528 an increase by 4.55% from the previous FY. Similarly, the total sales in FY 2024/25 were 11,288 GWh, including internal consumption. The gross revenue from energy sales reached to 109.221 billion rupees, with an increase of 9.58 billion rupees compared to the previous FY. The commercial and industrial categories together contribute 44.43%, of the total sales whereas the domestic consumers contribute 42.02%. The commercial and industrial consumers together represent 1.99% and the domestic consumers represent 91.08% of total consumers. The sales and revenue increment in comparison with the previous FY are 10.38 % and 9.62% respectively.

The average collection period (ACP) was recorded as 45.84 days excluding street light dues anddedicated/trunk line dues. As per Government's subsidy policy, NEA has provided free energy of 176,711,018 kWh to approximately 2,073,514 numbers of domestic consumers having the connection of capacity 5 Amp. Further, the average selling price was calculated as NRs. 9.44/kWh. The average sales per consumer increased from 1,873 kWh to 1,978 kWh and the collection from online payment increased to NRs. 34.326 billion from NRs. 27.438 billion. The loss reduction activities have been closely monitored at the central level and directives were issued regularly to achieve the set loss target. With continuous initiations and efforts of NEA's staff s, the distribution system loss has been registered to 10.39% in F/Y 2024/25.

In F/Y 2024/25, 569 ckt-km of 33 kV Line, 2,455 ckt-km of 11 kV line, 6,312 ckt-km of 0.4/0.23 kV line, 3,151 numbers of distribution transformers with the total capacity of 338 MVA and 15 numbers of 33/11 kV Distribution Substation with the total capacity of 140 MVA have been added in the distribution system.

Likewise, 297.8 MVA substation capacity has been added though the upgradation of the substation across the country. Along with these distribution infrastructures, 8,145 ckt-km of 33 kV, 53,131 ckt-km of 11 kV and 156,790 ckt-km of 0.4/0.23, 210 numbers of 33/11 kV substations with the total capacity with 2,997 MVA and 48,625 numbers of distribution transformers constitute in the distribution system.

Out of 753 local levels, 539 local levels are substantially electrified and 196 local levels are partially electrified so far. The remaining 18 local levels, which have no connection with the national grid, have access to electricity via alternative energy sources.

Programs and Activities

During the fiscal year 2024/25, the Distribution and Consumer Services Directorate (DCSD) moved forward with significant initiatives to strengthen the nation's electricity infrastructure. The directorate focused on expanding and upgrading the distribution network, adding new consumer connections, and implementing measures to limit electricity losses. Simultaneously, efforts have been made to enhance metering and billing systems and improve the collection of outstanding payments. A resolute monitoring of inventory allowed for the efficient use of available materials in these endeavors.

A key priority for the DCSD is ensuring a reliable and quality electricity supply. To this regard, activities such as upgrading the existing distribution network, constructing new feeders, and enhancing and adding distribution transformers are ongoing. These efforts align with the Government of Nepal's policy to encourage the use of electricity for cooking, transportation, and industry to reduce reliance on fossil fuels. This national objective will impose further reinforcement and modernization of the distribution network to maintain service quality and reliability as demand grows.

In line with the government's goal of providing electricity access to all citizens, NEA is actively extending the national grid to un-electrified regions. To bridge this gap in remote and geographically challenging areas where grid extension is not immediately feasible, NEA is also exploring and implementing off-grid solutions.

Felicitation of High-Consuming Consumers

NEA has initiated to recognize and has started to felicitate the top ten consumers at the central, provincial, and distribution center levels who consistently pay their tariffs. These consumers are categorized as Most Important Consumers (MIC), Very Important Consumers (VIC), and Important Consumers (IC), respectively so as to provide customer care services on priority basis from NEA.

Deputation of Safety Engineer/Protection and Relay Engineer

NEA has begun to appoint dedicated engineers for safety, as well as for protection and relay functions. Each provincial office has designated engineers to be responsible for both safety and relay/protection engineering so as to reduce electrical accidents as well as creating awareness to consumers regarding electrical safety.

Quality Control and Monitoring

The 'Quality Control and Monitoring Unit' has been established in each department, provincial office, and division office to focus on strict quality control and monitoring of construction works related to distribution infrastructure. Reliable and high-quality supply can be ensured if the distribution infrastructures are built according to the appropriate standards and with quality materials.

In this context, the Quality Control and Monitoring Unit primarily focuses on quality control in the construction of lines, substations, buildings, and associated civil works. It also monitors various construction activities, safe working practices, and other relevant tasks as required by the respective offices.

To ensure the quality of procured distribution line materials and equipment, the DCSD will establish an Acceptance Testing Laboratory in Kharipati, Bhaktapur. This facility will be capable of testing most electrical equipment and line materials up to a 33 kV voltage level, similar to the standards of an internationally accredited laboratory.

Grievance Handling and No-Light Service

To minimize consumer complaints regarding no-light services and address grievances promptly, call centers have been established for seven Provincial Offices and the Hetauda Divisional Office, with ongoing efforts for the Lumbini Division Office. The toll-free number 1150 is available for reporting grievances, which can be submitted via voice call or text message.

Loss Reduction

Provincial/Division Offices/Distribution Centers were assigned with certain loss targets to be achieved within reported fiscal year. Loss reduction, as the regular activity of DCSD, and shall be continued in coming years.

Plans and Programs

- DCSD is commencing live line maintenance work as a symbolic. For this procurement of two numbers of crane mounted live line maintenance equipment are being procured which is in final stage. After receiving this equipment, it will be operated by DCs for live line maintenance which will enhance the reliability of the power supply to the consumer.
- Acceptance Testing Laboratory will be established for the testing of electrical materials and equipment up to 33 kV.
- Strengthening and upgradation of 33/11 kV substation in association with Nepal government, internal fund of NEA as well as funds for donor agency will be continued.

Grid Solar and Energy Efficiency Project

The Government of Nepal (GoN) received a credit from the World Bank (WB) towards the cost of Grid Solar Energy and Energy Efficiency

Project (GSEEP) under IDA Credit No. 5566-NP (Project ID P146344) for an amount of 130 MUSD under a counter financing of 8 MUSD by the GoN. The GSEEP Project comprises of following two components:

Component 1: Grid Connected Solar PV Farms Development has been completed and 25 MWP has been connected to the National Grid. The contractor is carrying out the operation and maintenance since last two years.

Component 2: Under Distribution System Planning and Loss Reduction, five contractors have been completed and following projects are in progress:

- Design, Planning, Engineering, Procurement, Installation, Testing and Commissioning of 8 New 33/11 kV substations and 33 kV lines for the development of NEA Grid. (Kapilbastu, Arghakhachi, Sindhuli, Ramechap and Gulmi);
- Design, Supply, Installation/Erection, Testing and Commissioning of 11/0.4kV Distribution System (Taplejung, Panchthar and Ilam);
- Design, Supply and Installation of Substations and 33kV Lines in Bharatpur, Dhading, Hetauda, Kavre, Lagankhel, Nuwakot, Palung, Ramechhap, Dolakha and Sindhupalchok districts; and

Nepal Distribution System Upgrade and Expansion Project (AIIB)

NEA has received a loan-financing from the Asian Infrastructure Investment Bank (AIIB) towards the cost of financing of the proposed project. The districts selected under this project are Dang, Banke, Bardia and Rolpa from Lumbini Province and Rukum West, Jajarkot, Surkhet, Salyan, Kalikot, Jumla, Mugu and Humla from Karnali Province.

This project will construct nineteen (19) new 33/11 kV substations, more than 411.56 km of 33 kV lines and approximately 1,800 km of 11 kV distribution lines. The project will also include installation of around 3,150 km of LT lines and 1,045 number of distribution transformers so as to achieve the cent percent electrification in the project implementation areas.

Nepal Distribution System Upgrade and Expansion Project (EIB)

NEA, through the GoN, has received a loan-financing from European Investment Bank (EIB) towards the cost of financing of the proposed project. The districts selected under this project are Parasi, Rupandehi, Rolpa, Dang and Rukum East from Lumbini Province and Bajhang, Bajura and Baitadi from Sudurpaschim Province.

This project will construct thirteen (13) new 33/11 kV substations, more than 112 km of 33 kV lines and more than 1,314 km of 11 kV distribution lines. The project will also include the installation of around 2,813 ckt-km of LT lines and 621 number of distribution transformers so as to achieve the cent percent electrification in the project implementation areas.

Electricity Supply Reliability Improvement Project (ESRIP)

The World Bank is funding the Electricity Supply Reliability Improvement Project (ESRIP) to enhance the reliability of electricity supply in various regions. The major objectives of this project is to improve the reliability and quality of electricity supply as well as reducing outages and enhance service delivery to consumers.

The project primarily focuses on regions facing significant electricity supply challenges of voltage fluctuations, long feeder lengths as well as reliability issues. The scope of the project includes addition of new distribution substations, upgrading distribution infrastructure, and implementing new technologies for feeder automation and smart metering, leading to improved reliability and operational efficiency.

Some of the major highlights of work executed by various departments under DCSD are listed in the following pages.

I. Planning and Technical Services Department (PTSD)

Planning and Technical Services Department (PTSD) is responsible for the planning and preparation of distribution system expansion programs, as well as supporting the Distribution and Consumer Services Directorate (DCSD) in technical and commercial matters. This department comprises two functional divisions: The Loss Analysis Division and the Technical Support Division.

Loss Analysis Division

Loss Analysis Division within PTSD examines losses occurring in the distribution system. Advanced metering infrastructure, including smart meters integrated into a Meter Data Management System (MDMS), has been implemented to measure energy at receiving points and at the interbranch between two distribution centers, enabling accurate tracking of energy transactions across the network. The objective of this division is to conduct rigorous analyses of distribution system losses, leading to improved energy efficiency, reduced operational costs, and enhanced overall system performance.

Technical Support Division

Technical Support Division under PTSD is responsible for developing and maintaining technical standards, specifications, and design guidelines for the distribution system infrastructure. This division provides engineering support for the design of new distribution projects, including substation layouts and infrastructure optimization. Additionally, it assists the DCSD with technical matters to ensure compliance with relevant codes, regulations, and industrial best practices.

Some of the projects under monitoring of PTSD are listed below.

33/11 kV Substation Rehabilitation Project

The "33/11 kV Substation Rehabilitation Project," under the Planning and Technical Services Department (PTSD), is tasked with strengthening the distribution system and improving the reliability of 33/11 kV substations. To date, the project has successfully rehabilitated 82 distribution substations, within last two years, across Nepal through the replacement or addition of new power transformers with total capacities of 613.4 MVA including 6/8 MVA, 10/13.3/16.6 MVA, and 20/24 MVA, along with other essential substation equipment.

Among these, 15 substations, commissioned since March 3, 2025, are upgraded under the Substation Automation System (SAS) to enable operations from both local control centers at each substation and remote-control center located at the respective distribution office. This project has increased the total substation capacity by 297.8 MVA through the upgrade and addition of 33/11 kV power transformers during the reported year.

Distribution System Voltage Improvement Project

The scope of the project includes the installation of capacitor banks at 33/11 kV substations to improve voltage levels in the distribution lines. The project has recently completed the installation of 110 MVAr capacitor banks at 14 different 33/11 kV distribution substations, which are now in operation.

Madankudari-Makaibaari-Singati 33 kV Line and Substation Project

The scope of the Project includes the construction of 33/11 kV, 6/8 MVA substation at Majhifeda of Kavre district with interconnection facilities. Substation construction work and 11/0.4 kV distribution line work have been completed. Pole erection work of 33 kV transmission line has also been completed. The contract is terminated due to non-performance of the initial contractor and new contract has been signed with another contractor to complete the remaining work of 33 kV line. The Project is scheduled to be completed by FY 2082/83.

Reconstruction and Improvement of Electricity Distribution System (KFW funding)

Promotion of Solar Energy in Rural and Semi-Urban Regions II

The Government of Germany has committed up to EUR 8 million to support the development of ground-mounted, grid-connected solar PV installations at four locations: Middle Marsyangdi Hydroelectric Project (MMHEP), Jhupra of Surkhet, Suryapura of Gandak, and Kulekhani of Markhu. The combined installed capacity of these solar projects is expected to reach approximately 16 MW (DC). Each site is located adjacent to existing hydropower facilities, promoting a model of solar-hydro synergy by leveraging the existing transmission infrastructure.

Rural Electrification Programs

Government of Nepal (GON) announced under its "Plan and Policy" for **cent percent electrification** in the country. In order to achieve the GON's above mentioned target, rural electrification programs through different projects are being executed with funding from Government of Nepal (GON) and Nepal Electricity Authority (NEA) as well as grant and loan assistance from KfW, ADB, EIB and AIIB. The electrification programs funded by GON/NEA has been implemented through seven different projects covering nine districts of Koshi Province, four districts of Bagmati Province, one district of Gandaki Province, one district of Karnali Province and one district of Sudur Paschim Province having the scope of 15 numbers of 33/11 kV substations, 300 km of 33 kV line, 3,034 km of 11 kV lines and 7,174 km of 0.4/0.23 kV distribution networks with 1,919 numbers of distribution transformers via following projects.

- Taplejung-Panchthar-Ilam-Jhapa Rural Electrification and Substation Construction Project
- Bhojpur-Sankhuwasbha 11/0.4 kV Rural Electrification Project
- Solukhumbu-Okhaldhunga 33 kV Rural Electrification and Substation Construction Project
- Khotang - Udayapur 11/0.4 kV Rural Electrification Project
- Kavre-Makwanpur-Ramechhap-Sindhuli Rural Electrification Project
- Nawalpur Rural Electrification and Chusang (Mustang) 33 kV Transmission and Substation Construction Project
- Darchula - Dolpa 11/0.4 kV Rural Electrification Project

Most of the contract packages under above projects have been completed providing electricity access to nearly 50,000 new households during the reporting year.

Smart Metering and Automation Department

Smart Metering and Automation Department, one of the vital departments under DCSD, is working to modernize the existing metering infrastructure by implementing smart energy meters throughout the country gradually for reliable and remote meter reading. It is working to implement and support computerized M-power Billing system in all distribution centers and collection centers and support ongoing RMS Billing project in terms of functional requirements, data migration expertise, and HHD integration as needed.

This department has two divisions namely Computerized Billing and Network Division and Metering and Automation Division. Furthermore, the department consists of two sections namely GIS and IT section and Distribution System Control Center as well.

Computerized Billing and Network Division

Computerized Billing and Network Division (CBND) plays a crucial role in the Nepal Electricity Authority (NEA), continuously working to enhance NEA's revenue collection. The M-power Billing System provides NEA with an efficient billing system, equipped with numerous features and modules to monitor the entire process and ensure transparency in the revenue management system.

The CBND has been successfully implemented across all NEA revenue collection centers, covering 100 percent of both the total consumer count and total NEA revenue. The introduction of Handheld Meter Reading Devices (HHD) in over 160 locations has improved energy sales and reduced human errors during meter reading. Additionally, the division has implemented Online Meter Reading Handheld Devices (Online HHD) with Wi-Fi functionality in many NEA locations that allows meter readers to directly upload data to the branch server system, enhancing efficiency.

Consumers can enter their meter readings from home via mobile apps, online platforms, or by calling the NEA hotline number 1150. The system is accessible through the website https://www.consumer.nea.org.np or the NEA application for mobile phone as well.

Online electricity bill payment system caters to all consumer groups, allowing them to pay electricity bills through various online banking, mobile banking services, and e-wallet services. The online payment system has significantly reduced the time consumers spend in queues and the money spent on transportation to pay electricity bills. NEA has collection total amount.

Metering and Automation Divi sion

Smart Metering and Smart Grid Project under Metering and Automation Division, completed the replacement of 72,000 Three Phase Electromechanical Whole Current Meters with Smart Whole Current Meters in first phase and in the second phase, installation of three phase smart meters for remaining consumers is in progress.

All the meters installed are in communication with Head End System (HES) and energy and electrical instantaneous data, meter events and alarms received from the meter through Head End System is exported to Meter Data Management System (MDMS) for data analysis and reporting purpose.

The Smart Metering Smart Grid project, is also integrating Three Phase CT operated smart meter, procured by Procurement Management Division, into its system. Consumers connected with smart meters for energy metering are integrated with billing system and configured for automated billing generation without any human intervention. Consumers receive electricity bill via SMS and email.

Smart Metering Smart Grid project has started analyzing the energy loading and energy requirement analysis, load analysis, reliability indices, customer GIS locational mapping, consumer ranking, energy balance and loss analysis models etc. that will be helpful and key factor in the planning and upgradation of the system.

DCSD is operating all over the country through seven provincial offices and two divisional offices to facilitate its consumers with line connection, revenue collection and handling grievances.

II. Koshi Provincial Office, Biratnagar

Koshi Provincial Office of NEA attends 1,100,644 numbers of consumer through 24 Distribution Centers spread over 14 districts. The majority of the consumers, about 89.12%, belong to the domestic category. It has registered and increased the connected load of 756 MVA during FY 2024/25.

The annual energy sales were 1,932 GWh increased by 12.60% from the previous FY and contribute to 17.12% of the total sales of energy of NEA. The gross annual revenue is NRs. 18.120 billion, which is about 16.59% of the total revenue earned by NEA. It has registered the overall increase of sales revenue by 12.29% as compared to the previous FY.

The distribution loss of Provincial Office has been registered to 12.27% from the last FY year loss of 9.87%. This year 29,034 consumer lines with due of NRs. 591.160 million were disconnected. With the concerted efforts of all Distribution Centers, the revenue collection has improved to 97.80%.

III. Madhesh Provincial Office, Janakpur

Madhesh Provincial Office of NEA serves 1,201,248 numbers of consumer through 23 Distribution Centers spread over 8 districts. The majority of the consumers, about 85.84%, belong to the domestic category. It has registered and increased the connected load of 639 MVA during FY 2024/25.

The annual energy sales were 2,430 GWh has been registered to 13.68% from the previous FY and contribute to 21.53% of the total sales of energy of NEA. The gross annual revenue is NRs. 21.746 billion, which is about 19.91% of the total revenue earned by NEA. It has registered the overall increase of sales revenue by 11.37% as compared to the previous FY.

The distribution loss of Provincial Office has been registered to 14.05% from the last FY loss of 15.29%. This year 36,978 consumer lines with due of NRs. 6.968 billion were disconnected. With the concerted efforts of all Distribution Centers, the revenue collection has improved to 92.00%.

IV. Bagmati Provincial Office, Kathmandu

Bagmati Provincial Office of NEA attends 920,520 numbers of consumer through 20 Distribution Centers spread over 10 districts. The majority of the consumers, about 95.35%, belong to the domestic category. It has registered and increased the connected load of 201 MVA during FY 2024/25.

The annual energy sales were 2,543GWh increased by 5.66% from the previous FY and contribute to 22.53% of the total sales of energy of NEA. The gross annual revenue is NRs. 27.863 billion, which is about 25.51% of the total revenue earned by NEA. It has registered the overall increase of sales revenue by 5.90% as compared to the previous FY.

The distribution loss of Provincial Office has been registered to 6.51% from the last FY loss of 5.60%. This year 23,039 consumer lines with due of NRs. 654.360 million were disconnected. With the concerted efforts of all Distribution Centers, the revenue collection has improved to 98.84%.

V. Bagmati Province Division Office, Hetauda

Bagmati Province Division Office of NEA serves 353,907 numbers of consumer through 6 Distribution Centers spread over 3 districts. The majority of the consumers, about 89.99 %, belong to the domestic category. It has registered and increased the connected load of 176 MVA during FY 2024/25.

The annual energy sales were 743 GWh increased by 4.77% from the previous FY and contribute to 6.59% of the total sales of energy of NEA. The gross annual revenue is NRs. 7.245 billion, which is about 6.63% of the total revenue earned by NEA. It has registered the overall increase of sales revenue by 5.65% as compared to the previous FY.

The distribution loss of Division Office has been registered to 8.59% from the last FY loss of 7.19%. This year 10,290 consumer lines with due of NRs. 228.213 million were disconnected. With the concerted efforts of all Distribution Centers, the revenue collection has improved to 96.53%.

VI. Gandaki Provincial Office, Pokhara

Gandaki Provincial Office of NEA attends 515,596 number of consumers through 13 Distribution Centers spread over 11 districts. The majority of the consumers, about 95.08 %, belong to the domestic category. It has registered and increased the connected load of 249 MVA during the year 2024/25.

The annual energy sales were 740 GWh increased by 7.76% from the previous FY and contribute to 6.56% of the total sales of energy of NEA. The gross annual revenue is NRs. 7.220 billion, which is about 6.61% of the total revenue earned by NEA. It has registered the overall increase of sales revenue by 7.62% as compared to the previous FY.

The distribution loss of Provincial Office has been registered to 8.67% from the last FY loss of 7.96%. This year 12,983 consumer lines with due of NRs. 182.291 million were disconnected. With the concerted efforts of all Distribution Centers, the revenue collection has improved to 99.72%.

VII. Lumbini Provincial Office, Butwal

Lumbini Provincial Office of NEA serves 572887 number of consumers through 11 Distribution Centers spread over 6 districts. The majority of the consumers, about 93.57 %, belong to the domestic category. It has registered and increased the connected load of 415 MVA during FY 2024/25 .

The annual energy sales were 1,662 GWh increased by 13.92% from the previous FY and contribute to 14.73 % of the total sales of energy of NEA. The gross annual revenue is NRs. 15.747 billion, which is about 14.42% of the total revenue earned by NEA. It

has registered the overall increase of sales revenue by 13.15% as compared to the previous FY.

The distribution loss of Provincial Office has been registered to 8.61% from the last FY loss of 7.67%. This year 20,497 consumer lines with due of NRs. 4.622 billion were disconnected. With the concerted efforts of all Distribution Centers, the revenue collection has improved to 96.96%.

VIII. Lumbini Province Division Office, Nepalgunj

Lumbini Province Division Office of NEA serves 572,887 number of consumers through 10 Distribution Centers spread over 6 districts. The majority of the consumers, about 91.57%, belong to the domestic category. It has registered and increased the connected load of 244 MVA during FY 2024/25.

The annual energy sales were 712 GWh increased by 9.95% from the previous FY and contribute to 6.31% of the total sales of energy of NEA. The gross annual revenue is NRs. 6.707 billion, which is about 6.14% of the total revenue earned by NEA. It has registered the overall increase of sales revenue by 9.52% as compared to the previous FY.

The distribution loss of Division Office has been registered to 10.11% from the last FY loss of 8.59%. This year 11,030 consumer lines with due of NRs. 2.111 billion were disconnected. With the concerted efforts of all Distribution Centers, the revenue collection has improved to 95.77%.

IX. Karnali Provincial Office, Surkhet

Karnali Provincial Office of NEA attends 178,794 number of consumers through 10 Distribution Centers spread over 10 districts. The majority of the consumers, about 96.16%, belong to the domestic category. It has registered and increased the connected load of 88 MVA during FY 2024/25.

The annual energy sales were 100 GWh increased by 19.80% from the previous FY and contribute to 0.89% of the total sales of energy of NEA. The gross annual revenue is NRs. 952 million, which is about 0.87% of the total revenue earned by NEA. It has registered the overall increase of sales revenue by 17.67% as compared to the previous FY.

The distribution loss of Provincial Office has been registered 17.02% from the last FY loss of 21.79%. This year 5,500 consumer lines with due of NRs. 33.217 million were disconnected. With the concerted efforts of all Distribution Centers, the revenue collection has improved to 97.97%.

X. Sudurpaschim Provincial Office, Attaria

Sudurpaschim Provincial Office of NEA serves 399,388 number of consumers through 12 Distribution Centers spread over 9 districts. The majority of the consumers, about 91.81%, belong to the domestic category. It has registered and increased the connected load of 228 MVA during FY 2024/25.

The annual energy sales were 421 GWh increased by 11.85% from the previous FY and contribute to 3.74% of the total sales of energy of NEA. The gross annual revenue is NRs. 3.617 billion, which is about 3.31% of the total revenue earned by NEA. It has registered the overall increase of sales revenue by 11.54% as compared to the previous FY.

The distribution loss of Provincial Office has been registered 13.60% from the last FY loss of 11.50%. This year 5,301 consumer lines with due of NRs. 86.115 million were disconnected. With the concerted efforts of all Distribution Centers, the revenue collection has improved to 99.62%.

Electrification in Rubi Valley, Dhading

PLANNING, MONITORING, AND INFORMATION TECHNOLOGY DIRECTORATE

The Planning, Monitoring, and Information Technology Directorate (PMITD), headed by the Deputy Managing Director, functions as a central corporate division of the Nepal Electricity Authority (NEA). This Directorate is responsible for directing and monitoring the operations of three departments: the Power System Management Department, the Corporate Planning and Monitoring Department, and the Information Technology Department. Each of these departments is led by a Director.

The Power System Management Department is tasked with load forecasting, grid impact studies, as well as generation and transmission planning for Nepal's power system. The Corporate Planning and Monitoring Department is responsible for formulating NEA's corporate plans and monitoring the implementation of projects financed by the Government of Nepal, NEA, and foreign investments. The Information Technology Department focuses on developing innovative IT solutions to automate various operational activities within NEA.

I. Corporate Planning and Monitoring Department (CPMD)

Corporate Planning and Monitoring Department (CPMD) is primarily established to facilitate the systematic and coordinated planning and monitoring of the capital resources for proper allocation of the budget and monitoring of the progress of the various projects under NEA. Those are:

- Preparing the annual budget for the projects financed by the Government of Nepal (GoN) and financed and/ or co-financed by Foreign Loan / Grant and NEA itself.
- Progress monitoring and reporting of all the projects under NEA financed by GoN, Foreign Loan/ Grant and NEA itself to NEA, MOEWRI, MOF and other stakeholders.
- Liaison with NEA management, MOEWRI and MOF for the fiscal budgeting, entry to LMBIS, OPMCM and progress reporting of different projects.
- Assisting PMIT Directorate in formulating plans and reports like corporate development plans, annual review report and others.

A. Fiscal Budgeting of Infrastructure Development Project

The department is responsible for appropriating the annual budget ceiling received from the GoN and mobilizing internal resources to ensure the achievement of the set targets. Coordinating with respective directorate and projects for preparation of the fiscal budgeting every year and preparation of the plan and program details with the optimal use of allocated budget on an annual and quarterly basis which will be

the basis for disbursement. The process entails iterative consultations across multiple levels within the organizational structure of NEA for proposing final budget for the upcoming Fiscal Year.

B. Progress Monitoring & Reporting

Progress monitoring like annual, half-yearly, monthly and quarterly monitoring reporting to line agencies to NEA, MOEWRI, MOF, OPMCM and NPC etc. are the key functional tasks of the CPMD. Based on the approved budget, programs and with the actual progress achieved by the projects, progress is monitored and evaluated. Accordingly, CPMD recommends progress incentives for the respective projects.

This year CPMD has monitored a total of 216 projects under Generation, Transmission, Project Management Directorate, Engineering, Distribution and Consumer Services and Business Development Directorate. Among them, 73 projects belong to Transmission Directorate, 61 projects belong to PMD, 58 projects belong to DCS, 4 projects belong to Generation Directorate and 8 projects belong to BDD.

The department is also engaged in developing suitable monitoring and evaluation directives to assist the National Planning Commission (NPC), the Ministry of Energy, Water Resources and Irrigation (MoEWRI), and the Ministry of Finance (MoF) in matters related to NEA. Additionally, the department is liaison for the annual budgeting into the Line Ministry Budget Information System (LMBIS).

The CPMD provides necessary support to NEA management in conducting various studies related to institutional reform and development. Additionally, the department contributes inputs to studies undertaken by various organizations on topics relevant to NEA. It also plays a coordinating role in the development of projects under different financing modalities.

C. Project Monitoring under OPMCM

In recent years, for effective monitoring of the key development projects under government financing, the Office of Prime Minister and Council of Minister (OPMCM) has established an online monitoring system of the key projects under government fiscal plan and policy statement, fiscal budget and with significant importance like, transformatory projects, national pride projects and other important projects. CPMD furnishes key performance indicators and milestones for those projects, monitored by OPMCM monthly. Further, CPMD is engaging in establishing the key indicator of the energy sector like SDG, MDG etc. to NPC for the planning, dissemination and monitoring of the energy sector development related to NEA. There were 17 projects under OPMCM monitoring for last fiscal year F/Y 2023/24 and 23 for this ongoing new fiscal year F/Y 2024/25 as listed below.

Table: NEA Projects under OPMCM in F/Y 2024/25

SN	Projects
1	Dododhara Bareli 400 kV Transmission Line Project
2	Kohalpur-Surkhet-Dailekh 132 kV Transmission Line Project
3	Kulekhani Sisnery Pumped Storage Project
4	Lower Seti Hydropower Project
5	Nepal Bharat Power Transmission Line (Hetauda-Dhalkebar-Inaruwa) 400 kV Transmission Line Project
6	Upper Arun Hydropower Project
7	Doodhkoshi Storage Hydropower Project
8	Rasuwagadhi-Kerung 220 kV Transmission Line Project
9	Inaruwa Purniya 400 kV Transmission Line Project
10	Chameliya Jaulijivi 220 kV Transmission Line Project

11	Uttarganga Storage Project
12	Chhinchhu-Dododhara 400 kV Transmission Line Project
13	Lamahi-Chhinchhu 400 kV Transmission Line Project
14	New Butwal-Lamahi 400 kV Transmission Line Project
15	Tamakoshi-Kathmandu (Khimti-Bahrabise-Lapsiphedi 400 kV) 200/ 400 kV Transmission Line Project
16	Budhigandaki Corridor (Filim-Gumda-Ratmate) 400 kV Transmission Line Project
17	Karnali Chisapani Multipurpose Project
18	Doodhkoshi Corridor 400 kV Transmission Line (Tingla-Doodhkoshi-Dhalkebar and Tingla-Arun-Inaruwa-Anarmani) Project
19	Tamakoshi V Hydropower Project
20	Chainpur Seti Hydropower Project
21	Sunkoshi -3 Hydropower Project
22	Upper Modi A Hydropower Project
23	Rahughat Hydropower Project

D. Ongoing Development: Digital Software for Budgeting & Monitoring

For effective and efficient planning and monitoring, currently in coordination with ITD, CPMD is developing software for Budgeting and Monitoring of the projects under NEA which are financed by GoN, Foreign Agencies and NEA itself, for automation and scientific data storing and data retrieval process. Use of such advancement of information technology in budgeting and monitoring of the projects seems essential and will tremendously reduce workload and enhance efficiency and transparency to support the planning and performance monitoring of the project managers and staffs involved which in turn will be great tools for rational and informed management decisions needed for the project and evaluation of the staff and provision for the incentives as well. The tedious, difficult voluminous data that works with the possibility of human error in each step will be drastically reduced and it makes the progress status of the projects clear to all the projects, CPMD, related Directorates and the management.

II. Information Technology Department (ITD)

The Information Technology Department (ITD) continues to play a pivotal role in supporting the organization's digital transformation and operational efficiency. As NEA advances towards smarter grid solutions and customer-centric services, the IT Department has remained instrumental in developing, maintaining, and securing the technological backbone that supports NEA's wide-ranging operations.

Operational Efficiency and Management:

A Business Intelligence (BI) dashboard for decision-making will be implemented which serves as a centralized platform that integrates and visualizes real-time and historical data from various operational, customer, and financial systems. It enables utility executives and managers to monitor key performance indicators such as energy demand and supply, grid reliability (e.g., outage frequency and duration), revenue generation, maintenance schedules, and customer satisfaction. By presenting data through interactive charts, maps, and trend analyses, the dashboard supports informed decisions related to load forecasting, infrastructure investment, regulatory compliance, and sustainability goals. Ultimately, it enhances operational efficiency, reduces downtime, and improves service delivery in an increasingly complex and data-driven energy landscape.

Upgradation of different application system software (Customised Accointing System (CAS), Centralized E-Attendance System, Employee Information Portal and others) has been successfully done to enhance the functionality, security, and user satisfaction while ensuring

seamless integration and minimal disruption to business operations.

Ticket Management System has been implemented to ease the technical support system of NEA.

Meeting Management System has been implemented for High Level Meeting Management.

Upgradation of Centralized E-Attendance System has been successfully done to cater Attendance and Log of employee

Cybersecurity Measures:

Information Technology Department (ITD) has begun adopting dedicated cyber security equipment to protect its growing digital infrastructure, particularly as it transitions toward a fully digital authority with centralized data control, smart-metering, and SCADA-connected substations. ITD has prioritized implementing robust firewalls, Security Information and Event Management (SIEM) systems, and continuous network monitoring to safeguard NEA's networks and critical systems.

As per best practice, Information Technology Department will develop and maintain SOPs for critical IT and security processes, track and resolve audit findings, create and review a succession plan for key IT roles, and implement a regular backup testing and documentation schedule.

Further secure communication channels and data processing practices will be implemented to prevent unauthorized access and ensure the confidentiality and integrity of sensitive information. Additionally, appropriate access controls and system integrity measures will be applied to safeguard sensitive financial data against fraud and unauthorized modifications.

Data Center:

The initiation of newly built Data Center along with future up-gradation of Network Communication Backbone shall not only benefit NEA as a whole, but also can be used as a revenue generating source by leasing bandwidth and data space to government Office and Private Organizations in the near future.

Establishment of Disaster Recovery Center has also been initiated. Together, they form a comprehensive recovery strategy: data centers protect and restore technological assets, while DRCs facilitate logistical, financial, and human support—enabling businesses to quickly resume operations with minimal downtime.

Enhanced Customer Interaction:

In an era of increasing customer expectations and growing demand for timely information with customer relying on traditional channels (hotline, SW and website), Nepal Electricity Authority (NEA) faces persistent challenges in delivering efficient and accessible customer service. To address this, NEA envisions a transformative leap in customer engagement by implementing an **AI-powered chatbot.** Designed as a smart self-service assistant, the chatbot will provide instant, accurate answers to frequently asked questions. Importantly, the chatbot will feature multi-language capabilities (Nepali and English) to ensure inclusivity and accessibility for all segments of NEA's customer base.

Upgraded NEA Mobile App and CRM (Customer Relation Management System) software has added features like bill checking, seamless payments, fault information, and complaint management, improving customer service and engagement.

Implementation of Grievance Management System to cater resolving complaints/ concerns from individuals or groups within an organization in relation to a service or from outside the organisation (Hello Sarkar).

NEA website will be upgraded to a new website to enhance the functionality, security, and user satisfaction while ensuring seamless integration and minimal disruption to business operations.

Corporate Payment System will be implemented for customers with multiple accounts in NEA (NTC, Ncell, government) which will ease the payment process.

III. POWER SYSTEM MANAGEMENT DEPARTMENT

Power System Management Department (PSMD) is mainly responsible for the load forecast, generation and transmission line planning with balancing the need for reliability, efficiency, security, sustainability and regulatory compliance of Integrated Power System (INPS) of Nepal.

PSMD identifies the importance of the necessity of the domestic and cross-border lines and also highlights the constraints in the grid that could pose operational risk and that can reduce efficiency due to outages in the Integrated Nepal Power System. It also develops transmission configurations for evacuating power from planned generation projects through different technical studies such as load flow, short circuit, steady state and transient stability.

PSMD also provides advisory services to the power sector stakeholders upon their request. It also assists the directorates and departments within NEA by providing necessary data and suggestions regarding implementation of planned projects and its consequences in INPS and its alternatives.

The department is diligently involved to prepare Corporate Development Plan of NEA to achieve NEA vision of becoming "a modern, reliable, and resilient utility that ensures secure and uninterrupted electricity supply, serves as the infrastructure and energy reserve backbone of Nepal, and creates long-term value for the nation and its people." The department has also conducted the energy simulation and load forecast for the Corporate Development Plan.

Grid Impact Study (GIS) for new generation projects is also one of the main focus of Power System Management Department (PSMD). The Grid Impact Study (GIS) analyzes the effect of new connection of load and generating plant. NEA Grid ensures satisfactory operation of the NEA Grid in conformity with the Nepal Electricity Grid Code; requirement for additional transmission lines, reinforcement in the network, and requirement for the installation of capacitors and reactors are recommended. The study gives the glimpse of the loading condition of the transmission lines.

In FY 2024/25, Power System Management Department carried out following technical studies at the request of NEA's different departments. Notable among them are:

- Closely collaborated with the Joint Technical Team (JTT) of India and Nepal to study the possibilities and requirements of power exchange between India and Nepal.
- Associated with grid interconnection study conducted by Joint Technical Group (JTG) of State Group Corporation of China (SGCC) and Nepal Electricity Authority (NEA).
- Grid Impact Study of 43 hydropower projects developed by IPPs with the total installed capacity of 2723 MW was performed.
- Grid Impact Study of 2 bulk load industries of the total load 20 MVA to be connected to the INPS was conducted.
- A cumulative Grid Impact Study was completed for 960 MW Solar Power Plants tendered by NEA.
- Power Evacuation Study of Jawa Tila Hydroelectric Project was carried out.
- Load flow analysis of INPS for upcoming wet season has been conducted and the various recommendations has been mentioned.
- Fault analysis of New Butwal-Lamahi 400 kV Transmission Line, Nijgad-Ramauli-Pokhariya 400 kV Transmission Line , and Marsyandi Corridor 220 kV Transmission line were conducted.
- Coordinated with JICA to study on Integrated Power System Development Plan for Urban Transmission and Distribution System Improvement Project.
- Coordinated with MCC to study on 'Sub-transmission Planning and Protection Upgradation' project.
- The Load forecast Report for upcoming ten years was prepared.
- Preparation of 5 year Sub-Transmission Plan was carried out.

ENGINEERING SERVICES DIRECTORATE

Engineering Services Directorate (ESD), led by the Deputy Managing Director, is responsible to carry out study from project identification to feasibility including geological, geotechnical investigations, design, and environmental assessments for hydropower and transmission line projects. It also provides training, consulting, and advisory services for NEA's infrastructure projects. ESD comprises four departments and two divisions.

I. PROJECT DEVELOPMENT DEPARTMENT

The Project Development Department (PDD) under the Engineering Services Directorate is responsible for the study and design of hydropower and transmission line projects. Its major functions include identifying potential projects, screening and ranking them, conducting prefeasibility and feasibility studies, carrying out detailed engineering design, and preparing tender documents. The department is organized into four divisions: Project Identification, Hydro Sedimentology, Survey, Norms Specification and Design Division. Currently, the department is handling multiple hydropower projects at different stages of study and development.

Jawa Tila Hydroelectric Project

Jawa Tila Hydropower Project is a PROR (Peaking Run-of-River) type project situated in the Jumla District of Karnali Province. The headworks are located near Rara Lihi village, while the powerhouse is near Nagma Bazar in Tila Rural Municipality. A survey license for the project was granted by the Department of Electricity Development (DoED) on October 5, 2023, with a validity of two years. The project is designed with an installed capacity of 70.37 MW and is expected to generate an annual energy output of 327.81 GWh.

During this fiscal year, layout and capacity optimization has been completed. A dam height of 18 m and discharge of 55 m^3/s were finalized for the feasibility study. Feasibility design of all major components has been completed along with economic and financial analysis. EIA study is going on and SD/TOR have been submitted to DoED. Under the Geotechnical Investigations ERT has been completed and core drilling work is in process. A preliminary design for 132 kV, 7 km transmission line for power evacuation has been completed.

Automatic Level Reader (AWLR) installation at Tila River, Jumla

Preparation for Drilling work at Tila HEP

Syarpu Lake Pumped Storage Hydroelectric Project

Syarpu Lake Pumped Storage Hydroelectric Project (334 MW) is a proposed pumped storage project located in Bafikot Rural Municipality, Rukum West District, Karnali Province. The project utilizes Tharkhola and Syarpu Lake as its primary water sources. The upper reservoir will be formed by raising the water level of Syarpu Lake by 7 meter, while the lower reservoir will be created by constructing a 73-meter-high dam, with the outflow eventually draining into the Bheri River. A survey license for the project was obtained from the Department of Electricity Development in 2023 AD, valid for a period of two years.

As a part of the feasibility study, topography survey has been completed and hydrological study is being gradually updated with the field data. Geological and Environmental study is being conducted. Meanwhile feasibility design is also being carried out.

Identification of Pumped Storage Hydropower Project

By the end of F/Y 2081/82, a total of 52 pumped storage projects with a combined capacity of 59,894 MW and 10 storage projects totaling 2,785.4 MW were identified. In the same fiscal year, 11 pumped storage projects (12,052 MW) and 4 storage projects (415.4 MW) were further identified and ranked. Prefeasibility assessments, including site visits and evaluations of hydrological, geological, social, and environmental aspects, were conducted. Pre-feasibility study of top-ranked projects such as Thuligad Storage (102.9 MW) and K-65 Pumped Storage (512.9 MW) were carried out. Additionally, license application processes were completed for Hulingtar-Dumpkin PSHP (494.5 MW) and Kulekhani-Sisneri PSHP (100 MW).

Karnali Chisapani Multipurpose Project

The Karnali Chisapani Multipurpose Project (10,800 MW) is planned for the development on the Karnali River, at the intersection of Sudurpaschim Province (Kailali, Doti, Achham), Karnali Province (Surkhet) and Lumbini Province (Bardiya). The Project aims to provide significant hydropower generation and flow regulation to enhance agricultural productivity in both Nepal and India. Additional anticipated benefits include flood control, water supply, fisheries development, navigation and recreational opportunities.

During this fiscal year, consulting firms have been shortlisted following the PPMO standard guidelines as an interim process for the procurement of consulting services to update the Feasibility study of 1989 and to carry out the Detailed Engineering Design and preparation of tender documents for the construction of the project. Simultaneously, preparatory work is underway for the procurement of consulting services for Environmental and Social Studies in line with national and international standards. In parallel the department is also conducting its own depth studies of the project along with investment arrangement with different financial entity.

Sunkoshi -3

The Sunkoshi-3 Storage Hydroelectric Project, with an installed capacity of 683 MW, is located in Kavre and Ramechhap districts of Bagmati Province, Nepal. The dam site lies on the boundary between Temal Rural Municipality (Kavre District) and Khadadevi Rural Municipality (Ramechhap District).

Currently, NEA is conducting further detailed studies. The Request for Proposal (RFP) for consulting services related to the Detailed Engineering Design and Preparation of Tender Documents has already been issued to shortlisted consulting firms. The technical evaluation of the proposals has been completed and the process of financial proposal opening is underway. Several key technical assessments, including hydrological and reregulation studies, have been conducted. In addition, the project has successfully completed a Hydropower Sustainability Assessment and has received Certification Status. A Joint Venture Agreement has been drafted for the development of the project in coordination with the Bangladesh Power Development Board.

Arun-4

Arun-4 Hydro Electric Project is a run of the river type project proposed on Arun River in Bhot Khola and Makalu Rural Municipality of Sankhuwasabha District.

The Arun-4 Hydropower Project (490.2 MW) has made key institutional and technical advancements. The survey license was renewed by the DoED and is now valid until 2082/07/07. The MoU extension process has been initiated and is currently under review. The Joint Venture Agreement draft has been finalised. A joint survey has been done with Upper Arun to resolve the common benchmark issues. Additionally, a GLOF (Glacial Lake Outburst Flood) study has been completed.

Similarly, **PDD** has also studied different small hydro projects for rehabilitation and upgradation. During this fiscal year rehabilitation of Gorkhe small hydropower of Illam and detailed design of Potmara small hydropower of Kalikot has been finalised and submitted.

Professional works done by Survey Division

In this fiscal year, the Survey Division carried out significant survey and mapping activities across multiple energy infrastructure projects. Completed works include the Damak Kerun–Biratnagar 132 kV transmission line, Kathmandu Valley System Reinforcement Project (132 kV), Ratmate–Rasuwagadhi–Kerung 400 kV cadastral survey, Nijgadh–Pokharia 400 kV transmission line rerouting, and bathymetric surveys of Upper Tamakoshi and Kulekhani I reservoirs.

II. Environment and Social Studies Department (ESSD)

The Environmental and Social Studies Department (ESSD) of NEA, provides technical support for environmental and social assessments, safeguard implementation, and monitoring of energy projects in Nepal, ensuring compliance with national laws and international partner requirements.

A. Study Projects under ESSD

	Study Projects under ESSD	Status
1	Dhaubadi-Meghauli 132 kV TL	IEE Completed
2	Attariya-Dhangadhi 132 kV TL	IEE Completed
3	Balaju - Singhadurbar 132 kV TL	IEE Completed
4	Nepalgunj- Nanpara 132 kV TL	IEE Completed
5	Dudhkoshi Storage HEP	Resettlement plan of access road
6	Syarpu Lake PSP	SD/TOR Submitted to DoED
7	Tila PRoR	SD/TOR Submitted to DoED
8	Jagatpur-Madi 33 kV TL project	Supplementary EIA submitted to MoFE

B. Mitigation and Monitoring Projects

In F.Y. 2081/82, ESSD actively implemented environmental mitigation, enhancement, and monitoring measures for seven major projects, following approved EIA/IEE reports and funding agency requirements. Activities included awareness programs, skill development training, stakeholder consultations, compensatory plantation, and community and school support. The projects covered were Upper Arun Access Road, HDD 400 kV TL, Kohalpur-Surkhet 132 kV TL, SASEC Projects, Tamakosi-Kathmandu 400 kV TL, Dudhkoshi Storage HEP, and Chilime-Trishuli 220 kV TL.

Fisheries Study in Jawa-Tila HEP Area (70.37 MW), Jumla

Public Consultation Meeting at Lekhnath-Damauli 220 kV TLP Area, Byas Municipality, Tanahu

Syarpu Daha Pumped Storage HEP (334 MW) Area, Banfikot, Rukum (West)

Water Quality Measurement at Dudhkoshi Storage HEP (670 MW) Area, Khotang

III. Geological Investigation Department (GID)

The primary objective of this department is to provide consulting services in geology, geotechnical investigations including core drilling and in-situ testing, geophysics, and laboratory testing.

A. Major Geological and Geotechnical Investigation Activities

S.No.	Project	Description of activities
1	Upper Arun Hydroelectric Project	306.5m Core Drilling
2	Ikhuwa Khola Hydropower Project	328 m Core Drilling and 670m ERT
3	Kulekhani Sisneri PSP	500 m ERT Survey
4	Syarpu Lake PSP	3680m ERT Survey and 140 ha Engineering Geological Mapping
5	Jawa Tila Hydroelectric Project	3000m ERT and Core Drilling
6	Chyomuntanthang, Sindhupalchowk	Optical Televiewer Survey 0ver 50m

B. Laboratory and Field-Testing Activities

S.No.	Project	Description of activities
1	Upper Arun Hydroelectric Project	Rock core sample test
2	Concrete Pole Plant, Amlekhgunj	Aggregate and soil sample test
3	General Services Department, NEA	Field Density test
4	Smart Earth Works Engineering Consultancy	Disturbed and Undisturbed Soil tests
5	Build Up Nepal Engineering PVT.Ltd.	Brick Quality test
6	CIAA,Tangal	Compressive Strength, gradation and AIV test

ERT survey at IkhuwaKhola HPP (IKHPP)

Core Drilling at JawaTila

IV. TRAINING MANAGEMENT DEPARTMENT

Completion of the firstin-service training of Level 3 employees

The NEA Training Management Department (referred to as NEA-TMD) is situated at Kharipati, Bhaktapur, which has trained 29,510 employees including technical and non-technical during the last 35 years of its establishment.

NEA-TMD occupies around 203 Ropanis of land with well-equipped academic as well as hostel buildings for residential training. There are three well-managed hostel buildings with a capacity of 160 beds and a VIP Guest House. It has one administrative building for office use and a modern type of canteen building too. The main function is to prepare training, allocate resources, collect appropriate trainees, and perform other general management activities. In FY 2081-82 NEA-TMD conducted 74 training programs in different fields for 2183 trainees in total.

"In Fiscal Year 2081/82, for the first time within the Nepal Electricity Authority, a one-month in-service training for Level 3, Electrician was conducted by the Training Management Department." From now onwards, such in-service training will be conducted every year.

V. Physical Infrastructure Division

Building and Physical Infrastructure Construction Project (BPICP)

BPICP is constructing two office building projects at Lainchaur and Bhagwanpaau. Further, BPICP has commenced the detail design of five buildings outside the Kathmandu valley. Bhagwanpaau building is a three storey typical traditional Newari architecture building with sloped roof and jhingati tile. The total built-up area of this building is 5,753.53 sqm and ground coverage is 1,544.86 sqm.The project has achieved 73% physical progress and 49% financial progress.

Rendered view of New Office Building at Bhagwanpaau

Rendered View of Office Building at Lainchaur

Whereas, Lainchaur building is a highrise eight storey building with total built-up area of 6,228.95 sqm and ground coverage is 662.95 sqm. The physical progress is 33% and financial progress is 24%.

The overall physical progress of the project is 50% and financial progress is 32.87% and its completion time has been extended up to 24 July 2026.

Similarly, a consultant was selected to carry out the detailed design and environmental study for the construction of commercial office buildings at Dhangadhi, Bhairahawa, Pokhara, Birgunj, and Biratnagar. The work commenced from 28 August 2024 and 80% of the work has been completed. The conceptual design, the preliminary design report, and a draft of the detailed design report has been submitted. Furthermore, the Terms of Reference (ToR) for the Initial Environmental Examination (IEE) has been submitted to the Department of Electricity Development for approval.

VI. Electromechanical Design and Construction Division

This division has been monitoring the activities of different four pole plants and the central workshop located at Hetauda.

A. Central Workshop

Its primary objective is to uphold the highest quality standards while providing essential maintenance and testing services for transformers, ensuring the reliability and safety of Nepal's electrical infrastructure.

During the fiscal year 2024/25, the Workshop achieved significant milestones which includes repairing 1,951 distribution transformers and 6 power transformers. Additionally, it conducted testing on 2,792 transformers to verify their reliability and safety, and ensured the accuracy of 558 units of CT/PT. Currently, the facility has the capability to repair and test transformers with a power rating of up to 10 MVA and a voltage level of 33 kV. Efforts to upgrade the workshop's capacity to 63 MVA is ongoing.

Central Workshop Hetauda

Maintenance work at Central Workshop Hetauda

B. Pole Plant Design and Construction Section

There are four concrete pole plants under this section. The main objective of all the plants is to meet the pole demand of various DCS for electrification works. Those plants produce Prestressed Concrete (PSC) poles of size 8m, 9m and 11m. The details of the different pole plants with pole production in fiscal year 2081/82 is shown in the table below:

Pole Plant	Target	Production
Amlekgunj Concrete Pole Plant, Bara	17,760	18,276
Kotre Pole Plant, Tanahu	11,628	11,748
Tankisinuwari Pole Plant, Morang	21,600	17,742
Lamki Pole Plant, Kailali	16,800	14,038

Amlekhgunj Pole Plant

PROJECT MANAGEMENT DIRECTORATE

The Project Management Directorate (PMD) is tasked with executing projects funded by the Norwegian Government, Asian Development Bank (ADB), and European Investment Bank (EIB). These projects are aimed at:

- Enhancing the capacity of transmission and distribution systems.
- Digitization and Automation transmission and distribution systems.
- Digitalize NEA and strengthen its institutional capacity.

Additionally, with ADB funding, PMD conducts detailed engineering, environmental, and social studies for transmission lines and substations up to 400 kV, spanning over 1,000 km, and associated substations. Currently, PMD is implementing six ADB-assisted projects:

i. SASEC Power System Expansion Project (SPSEP)
ii. Power Transmission and Distribution Efficiency Enhancement Project (PTDEEP)
iii. SASEC Power Transmission and Distribution System Strengthening Project (SASEC PTDSSP)
iv. Electricity Grid Modernization Project (EGMP)
v. Project Preparatory Facility for Energy (PPFE)
vi. SASEC Electricity Transmission and Distribution Strengthening Project (SASEC ETDSP)

These projects are managed by three departments:

i. Transmission Line and Substation Department
ii. Distribution Line and Substation Department
iii. Social Safeguards and Environment Management Department

Projects Completed in year 2024/25

1. New-Butwal Bardaghat 220 kV Transmission Line Project

The project involved building a 220/132 kV, 100 MVA substation in New Butwal, Sunwal-13, Nawalparasi, and 21 km 220 kV transmission line from New Butwal Substation to Bardaghat. It aims to evacuate power from NEA/IPPs' plants in the Kaligandaki River Basin, connected to Dana and Kushma substations, while enhancing power reliability and transmission capacity. The substation was completed in November 2021, partially operational, and fully operational since October 2023 after the Kushma-New Butwal 220 kV line was finished. The 21 km transmission line, contracted to M/S POWERCHINA SEPCO1, faced delays due to EIA approval, COVID-19, and forest land issues but was commissioned on 12 December 2024.

Strung Kusma- New Butwal Multi-circuit Line

2. Marsyangdi – Kathmandu 220kV Transmission Line Project

The Marsyangdi-Kathmandu 220 kV Transmission Line Project was designed to transfer power from the Marsyangdi Corridor to Kathmandu Valley, strengthening Nepal's power system and enhancing transmission reliability. It includes 82 km double-circuit 220 kV line from Markhichowk, Tanahun, to Matatirtha, Kathmandu, using twin MOOSE ACSR conductors, and 320 MVA substations at both ends (GIS at Markhichowk, AIS at Matatirtha). The transmission line, contracted to M/S TATA Projects Ltd. in June 2016, was commissioned at 132 kV on 21 June 2022, and upgraded to 220 kV on 31 December 2024. The substation contract, initially with Shenzhen Farad Electric Co. Ltd in 2017, was terminated and reassigned to M/S China Machinery Engineering Corporation (CMEC) in December 2020. The Markhichowk GIS substation was commissioned on 31 December 2024, and the Matatirtha AIS substation began operating on 28 April 2024.

Matatirtha Substation

Markichowk Substation

3. Amlekhgunj 132kV Substation Construction Project

The Pathlaiya–Birgunj Corridor, a key industrial hub in Nepal's central-southern region, has seen growing power demand due to industrial expansion, especially in Simara. To address this, the Nepal Electricity Authority (NEA) built Amlekhgunj 132/66/11 kV GIS Substation to bolster the regional transmission network and ensure reliable industrial power supply. The project included a 132/66 kV, 2x100 MVA GIS substation and a 66/11 kV, 2x10 MVA substation, connected to the national grid via a LILO arrangement with the 132 kV Hetauda–Pathlaiya and 66 kV Hetauda–Amlekhgunj–Simara double circuit lines. Contracted to M/s TBEA Co., Ltd., China, on 7 May 2023, the substation was commissioned on 14 April 2025, enhancing transmission infrastructure in Madhesh Province, particularly for industries in Simara and Parwanipur reliant on the 66 kV line.

Overall layout of Amlekhgunj Substation

4. Mulpani Substation Construction Project

The project aims to enhance Kathmandu Valley's grid capacity, meeting the growing power demand in eastern and northern

Kathmandu and ensuring reliable electricity supply. It involves constructing a substation with four 132 kV GIS line bays, two 45 MVA power transformers, eight 11 kV outgoing feeders, and other facilities, with a LILO arrangement on the Bhaktapur-Chapali line using new towers. Initiated in FY 2021/22 under the ADB-funded Electricity Grid Modernization Project (EGMP) – Additional Financing, the contract was awarded to M/s TBEA Co., Ltd., China, on 21 August 2022. The 132 kV GIS substation was commissioned on 5 April 2025 and is fully operational.

Mulpani Substation and Dense Load Centers

5. Samundratar- Trishuli 3B 132kV Transmission Line Project

The project was designed to evacuate 270 MW from hydropower plants in the Tadi River Basin, Nuwakot District, via 26 km 132 kV double-circuit transmission line (including 3 km of four circuits for Upper Trishuli 3B HPP) to the Trishuli 3B Hub Substation in Pairebeshi, Nuwakot, connected to the national grid at Matatirtha Substation. It includes the Samundratar Substation with 2x30 MVA 132/33 kV and 2x8 MVA 33/11 kV transformers, two 132 kV line bays, and two 11 kV feeders serving Satbise and Ghyangphedi, resolving unreliable power and voltage issues. The Chaughada Substation was upgraded to 8 MVA at 33/11 kV. Over 10 IPPs (60 MW total) are under construction to use this substation. Funded by a $12 million loan from the European Investment Bank(EIB) and Asian Development Bank (signed 20 April 2015), the project, with a total cost of 1.55 billion NPR, was executed by ETERN-CCCE-FEPEC JV, China, under an EPC contract effective 28 November 2016. It was commissioned on 3 July 2021 and has now become fully operational.

Samundratar Substation

6. Electric Vehicle Charging Station Infrastructure Development Project

The project has successfully installed 62 charging stations across the country, with an average daily electricity sale of 35,000 units. Nepal Electricity Authority (NEA) operates charging stations that are the first choice for general consumers. Currently, NEA's charging stations, known as NEA Charge, form a mobile app and related Charging Management System (CMS)/Backend, creating a comprehensive and accessible EV Charging Ecosystem. With an easy payment system, simple Electric Vehicle Service Equipment (EVSE), Electric Vehicles, CMS, and mobile app coordination, charging stations installed even in remote areas are regularly operational. As of now, the NEA Charge Application has been downloaded by 30,500 general consumers who have created their accounts. Additionally, NEA operates charging stations in major cities and highways, achieving up to 10%-40% Annual Capacity Utilization. On average, 2,500 customers daily facilitate 35,000 units of electricity distribution through these stations. On average, one charging station serves 45–50 customers daily.

Daily Station Report from Centralize Monitoring Station

1. Transmission Line and Substation Department

Projects under Construction

The Transmission Line and Substation Department (TLSD) within PMD facilitates the execution of 132 kV or higher voltage transmission line and substation projects. The department is also looking after the grid substation automation projects and carrying out the studies of several projects of transmission lines and substations.

1.1 Tamakoshi - Kathmandu 220/400kV Transmission Line Project

The Nepal Electricity Authority (NEA), with funding from the Nepal Government and Asian Development Bank under ETESIP and PTDEEP, is executing the Tamakoshi-Kathmandu 220/400 kV Transmission Line Project to evacuate over 1000 MW of hydropower from Dolakha, Khimti Basin, and Sindhupalchowk to Lapsiphedi (Kathmandu) and New-Khimti (Ramechhap) substations for national grid integration. The project includes 42.762 km 400 kV double-circuit line from Khimti to Barhabise, 46.457 km 400 kV line from Barhabise to Lapsephedi, a 10 km 132 kV double-circuit and 4.1 km quad-circuit line from Lapsiphedi to Duwakot (Bhaktapur), and a 160 MVA, 220/132/11 kV GIS substation at Barhabise. Key hydropower projects served include Upper Tamakoshi and Madhya-Bhotekoshi.

The project is divided into three packages: Package I (Khimti-Barhabise 400 kV section, 100% complete, Contractor-KEC International Ltd, by 31 July 2025) has all 118 towers and stringing completed, ready for commissioning and energizing. Package II (Barhabise-Lapsiphedi 400 kV, 97% complete; Lapsiphedi-Duwakot 132 kV, 0% progress due to public issues, Contractor-Larsen & Toubro Ltd., due December 30, 2025) faces delays in the 132 kV section. Package III (Barhabise substation, 99% complete, Guangxi Transmission & Shenzhen Clou JV, due December 31, 2025) has finished civil works and equipment installation, awaiting energization.

Barhabise Substation

Final stringing at AP 44/0

1.2 Lapsiphedi and Changunarayan Substation Construction Project

The Lapsiphedi and Associated Substations Project, contracted to M/s Larsen and Toubro Limited, India, in November 2020 with completion expected by December 2025, involves constructing a 220/132 kV, 160 MVA and 132/11 kV, 22.5 MVA GIS substation at Lapsiphedi, a 132/11 kV, 45 MVA substation at Changunarayan, upgrading Teku substation to 132/66/11 kV, and adding 132 kV double-circuit line bays at Suichatar to charge the Suichatar-

Teku line at 132 kV voltage level. These facilities will evacuate power from IPPs and Upper Tamakoshi via the Khimti–Barhabise–Lapsiphedi 400kV transmission line, enhancing Kathmandu Valley's transmission capability with increase in reliability and power quality. Currently, 95% of equipment is delivered, Changunarayan is nearly complete, Teku and Suichatar have charged at two phases, and Lapsiphedi's structural works are done, with the approach road and boundary wall in progress.

132/11 kV Changunarayan Gas Insulated Substation

1.3 Khimti-Barhabise-Lapsiphedi 400 kV Substation Project

This project, contracted to M/s Grid Solutions SAS, France, on October 2, 2020, with completion time extended to 29 June 2026, aims to upgrade New Khimti, Barhabise, and Lapsiphedi substations at 400 kV level to evacuate clean energy from the Tamakoshi basin Basin to the INPS. The scope includes constructing New Khimti 400/220 kV substation with 2x400 kV line bays and 2 ICT bays with 630 MVA auto-transformers (*3 nos. 105 MVA + 1 spare*), Barhabise 400/220 kV substation with 4x400 kV line bays, 2 ICT bays for 320 MVA auto-transformers (*3 nos. 53.33 MVA + 1 spare*), and 1 bay for a 50 MVAR shunt reactor, and Lapsiphedi 400/220 kV substation with 4x400 kV line bays and 1 ICT bay for 315 MVA auto-transformers (*3 nos.105 MVA + 1 spare*). At New Khimti, civil works, 220/400 kV GIS, transformer installation, and commissioning are nearly complete, with charging expected by August 2025. Barhabise has completed civil works and transformer/reactor erection, with GIS and fire-fighting systems underway, aiming for charging by November 2025. Lapsiphedi's civil works are nearly finished, with equipment stored and charging planned for mid-2026.

400kV GIS Building and Transformer Banks at New Khimti Substation

1.4 Kathmandu Valley Transmission Capacity Reinforcement Project (Phase I)

The project plans to enhance Kathmandu Valley's grid capacity by constructing three 132/11 kV GIS substations (2x45 MVA each) at Phutung, Chovar, and Thimi, with the contract awarded to M/s Pinggao Group Co. Ltd, China. These substations will improve distribution reliability, ensure quality power supply, and address growing demand in the valley's outskirts while reducing strain on existing substations. Phutung is slated for completion by September 2025, Chovar by November 2025, and Thimi by January 2026, but recent flooding and disrupted Nepal-China road access via Rasuwa may delay equipment delivery (towers, power cables), potentially impacting the commissioning schedule.

Phutung Substation

1.5 Kathmandu Valley Transmission Capacity Reinforcement Project-Phase II

The Kathmandu Valley Transmission Capacity Reinforcement Project, extension to Phase-I, aims to enhance grid substation capacity and alleviate strain on the existing Bhaktapur-Baneshwor-Patan 66 kV transmission line by constructing 12 km 132 kV double-circuit underground cable transmission line from Bhaktapur substation to a new GIS substation at Balkumari (2x45 MVA, 132/11 kV; 2x63 MVA, 132/66 kV), with a connection to Thimi substation and a LILO of the 66 kV line at Balkumari. KEC International Ltd., India, is handling the Bhaktapur-to-Thimi 132kV underground line (4km), with most supply and installation tasks delivered and remaining work expected to finish by December 2025. The NEA has completed the IEE study for the Thimi-to-Balkumari section, with estimation and bidding documents in preparation for the Balkumari substation and remaining 132 kV underground line, with bids planned for F.Y. 2025/26.

1.6 Chobhar-Patan-Chapagaun Underground 132 kV Transmission Line Project

The Chobhar-Patan-Chapagaun Underground 132 kV Transmission Line Project plans to construct a 132/11 kV GIS substation at Patan with 4.5 km 132 kV double-circuit underground transmission line from Chobhar to Patan, featuring 3x45 MVA 132/11 kV and 2x63 MVA 132/66 kV power transformers to interconnect with the existing 66/11 kV Patan substation. For the substation, PEB for GIS Hall, earthing materials, and EoT crane are supplied, power transformers are at the Nepal border, and foundations for the control room, GIS Hall, and transformers are complete, with superstructure and cable tunnel construction ongoing. For the transmission line, 5,832 meters of HDPE pipes and 2,500 meters of PLB duct are delivered to the site, with 340 meters laid.

1.7 Borang-Lapang-Ratmate 220 kV Transmission Line Project

This project, estimated to be US$39 million project, funded by the Government of Nepal (GoN) and Asian Development Bank (ADB) under the Electricity Grid Modernization Project (EGMP), aims to enhance Nepal's power infrastructure by evacuating electricity generated by Independent Power Producers (IPPs) in the Budhigandaki and Ankhu River basins while improving power supply capacity with increased reliability and quality in Dhading and Nuwakot Districts. It comprises four key components: the construction of the Lapang 220/132/33 kV Gas-Insulated Switchgear (GIS) Substation, the Borang 132/3 kV Air-Insulated Switchgear (AIS) Substation, 24 km 132 kV double-circuit transmission line from Borang to Lapang using BEAR conductor, and a 24 km 220 kV double-circuit line from Lapang to Ratmate with twin MOOSE conductor. Initiated in 2077/78 (2020/21), the project is slated for completion by Mangsir 2082 (December 2025). As of Asadh 2082 (June-July 2025), substation layouts for Lapang and Borang are finalized, and drawings for switchyard equipment and civil designs are under review. Land acquisition notices for transmission line tower construction have been issued, with compensation distribution ongoing. Timely completion of design approvals and land acquisition processes is critical to meet the deadline, requiring efficient coordination to address potential delays.

1.8 Marsyangdi Corridor 220 kV Transmission Line Project

The Marsyangdi Corridor 220 kV Transmission Line Project, aimed at evacuating approximately 1,600 MW of hydropower from the Marsyangdi River basin and its tributaries to Nepal's Integrated Power System, involves constructing 113 km double-circuit 220 kV transmission line from Dharapani, Manang to New Bharatpur, Chitwan, via Khudi and Udipur, Lamjung, along with four associated substations. Funded by the European Investment Bank (USD95 million), the Government of Nepal, and Nepal Electricity Authority (NEA), the project is divided into three contract packages. The first package (67 km line from Udipur to Bharatpur) is 86% complete, with 170 of 200 tower foundations laid and 150 towers erected. The second package, involving Udipur and Bharatpur substations, both complete and operational

since 2024, enhancing local power reliability. The third package (46 km line from Dharapani to Udipur and Khudi/Manang substations) is 65% complete, with Khudi substation nearing completion and Manang's construction ongoing. Overall, the project is 73% complete as of July 2025, targeting completion by FY 2082/83 (2025/26), despite challenges like land acquisition and right-of-way issues.

Transformer bank of Udipur Substation

1.9 Dandakhet-Rahughat 132 kV Transmission Line and Associated Substation Project

The Dadakhet-Rahughat 132 kV Transmission Line Project, located in Myagdi District, Gandaki Province, aims to improve power supply in the Dhaulagiri zone and evacuate hydropower from the Myagdi and Kaligandaki River basins. Funded by the Government of Nepal (GoN) and Asian Development Bank (ADB) with a total estimated cost of NPR 450.69 crore, the project includes a 25 km 132 kV double-circuit transmission line with CARDINAL conductor and two substations: a 132/33 kV, 30 MVA AIS substation at Dadakhet and a 220/132/33 kV, 200 MVA GIS substation at Rahughat. Awarded to Larsen & Toubro Limited on 31 December 2021, with a completion date extended to November 16, 2025, the project has achieved 79.17% physical progress and 62.03% financial progress. Land acquisition (64 Ropani at Dadakhet, 92 Ropani at Rakhupiple) and civil works, including staff quarters and boundary walls, are largely complete. At Rahughat, 88% of terrace development is done, and 58 of 78 tower foundations are completed. Challenges include difficult terrain, landslide risks, and delays in forest clearance, impacting construction timelines.

132 kV Switchyard with CR Building at Dadakhet Substation

1.10 Kathmandu Valley Substation Automation Project

The Nepal Electricity Authority (NEA) is advancing a transformative project to modernize the Kathmandu Valley's grid system, focusing on digitization, automation, and centralized supervision to ensure a smarter, more resilient power network. Targeting thirteen key substations under the Kathmandu Grid Division, the initiative enables remote operation from a dedicated Master Control Centre at Baneshwor Substation. Awarded to M/S GE Vernova T&D India Limited on 5 January 2020, with a completion target of October 2025, the project aims to deliver reduced operational costs through streamlined processes, enhanced grid reliability with minimized downtime, extended equipment lifespan via proactive monitoring, and improved organizational efficiency through centralized control. By upgrading critical infrastructure, NEA seeks to provide uninterrupted, high-quality electricity to end-users, strengthening the power supply framework across the Kathmandu Valley.

1.11 Grid Substation Automation Project Phase 2

The Nepal Electricity Authority (NEA) is also implementing its Grid Substation Automation Project Phase-2 to digitize and modernize power systems by upgrading 39 existing and 15 newly commissioned grid substations outside Kathmandu Valley, totaling 54 substations, with a focus on remote control and monitoring. Funded by the Asian Development Bank under loan agreement EGMP, the project is managed

by the Project Management Directorate, began in 2078-79 (2021/22) and is set to conclude by 2082-83 (2025/26). The scope includes establishing six Master Control Centers (MCCs) at Duhabi, Dhalkebar, Hetauda, Butwal, Pokhara, and Attariya Grids, alongwith installing Substation Automation Systems (SAS), SCADA, digital surveillance, motorized isolators, pilot fault detectors, and hot-line communication systems. Awarded to GE Vernova T&D India Limited on 19 December 2022, with a 900-day completion timeline, the project has achieved 80% SCADA installation at substations under Dhalkebar and Pokhara Grids, with ongoing work in Hetauda and material procurement for the remaining grids. Expected to be largely completed by the end of the current fiscal year, the project aims to enhance control, enable preventive maintenance, support remote relay and bay operations, and improve data collection for future analysis, ensuring a more reliable and efficient grid.

1.12 132 kV Transmission Line Upgrading Project

NEA is undertaking this project to enhance the power carrying capacity of key 132 kV transmission lines, including Dhalkebar–Hetauda (138km), Suichatar–Matatirtha (4.5 km), Suichatar–Teku (4.5 km), and Suichatar–Balaju (5 km), by replacing existing ACSR conductors with High Temperature Low Sag (HTLS) conductors. This upgrade will improve transmission capacity at central part of INPS at 132kV voltage level. The contract, signed on 30 May 2022, with M/S HG Power Transmission SDN BHD, Malaysia, with a 900-day completion timeline. As of July 2025, upgrading work is complete from Hetauda to Pilluwa and partially within the Kathmandu Valley lines, achieving 59.45% physical progress and 56.78% financial progress. The project's completion within the remaining timeline will be critical to meeting Nepal's growing power demands.

1.13 Hetauda-Parwanipur-Pokhariya 132 kV Transmission Line Project

NEA is executing this project to bolster the transmission capacity and reliability in Parsa and Bara Districts. The project includes constructing 21.21 km, 132 kV four-circuit transmission line from Parwanipur to Pokhariya to support future connections, developing a new 132/33/11 kV substation at Pokhariya, and extending the bays at the existing Parwanipur Substation to meet growing industrial electricity demand. Additionally, the reconductoring of 17 km 132 kV double-circuit line from Piluwa (Pathlaiya) to Parwanipur with High Temperature Low Sag (HTLS) conductor has been completed and operational since January 2025. Key progress includes finalized designs for 132 kV four-circuit towers and approved Initial Environmental Examination (IEE) with a revised version under review. Fieldwork for the Pokhariya substation and Parwanipur bay extension is ongoing, targeting completion by March 2026, while the tender evaluation for the Parwanipur-Pokhariya transmission line is in progress. This project is pivotal for enhancing transmission efficiency and supporting industrial growth in the region.

1.14 Pangtan 132 kV Substation Project

The project aims to evacuate around 300 MW of power from nearly 10 Independent Power Producers (IPPs) in the Balefi Corridor, Sindhupalchowk district, while enhancing the local distribution system and supplying construction power to nearby IPPs. It includes installing 132/33 kV, 30 MVA, and 33/11 kV, 8 MVA power transformers at Pangtan substation, along with GIS bay extension works at the existing 400/220/132 kV Barhabise substation. Most equipment designs are finalized, with the majority already supplied and delivered to the site. Construction of the approach road, compound wall, fencing, and protection works is complete, and site grading/levelling is nearly finished. Major switchyard protection works are done, and construction of the control building, staff quarters, and other significant civil works are ongoing. The contract for substation construction was signed with M/S CQNEC-NHE JV, Nepal, on 22 July 2022, with project completion expected within the fiscal year 2082/83.

Pangtang Substation

Keraun 132/33 kV Substation

1.15 Keraun 132 kV Substation Project

The Keraun 132/33 kV Substation Project is funded by Asian Development Bank under the loan Electric Grid Modernization Program (EGMP). Awarded to Energypac Engineering Ltd. (Bangladesh) and SR Associates Infrastructure Pvt. Ltd. (India), the contract for designing, supplying, installing, and commissioning the substation and associated 33kV sub-transmission lines was signed on 11 June 2021, effective from 10 August 2021, with a deadline of 30 September 2025. The project aims to strengthen the electricity distribution network in Morang District's northeastern region by establishing a substation with 2×63 MVA, 132/3 3kV and 1×22.5 MVA, 132/11 kV power transformers, and constructing 13.67 km Keraun–Rangeli and 20.94 km Keraun–Biratchowk 33 kV double circuit lines. Power will be supplied via a Loop-In Loop-Out arrangement from the Duhabi–Padajungi 132 kV line.

As of 15 July 2025, civil works, including the boundary wall, staff quarters, and security post, are complete. The Keraun–Biratchowk line is nearly finished, with 100 meters of underground cable pending, and the Keraun–Rangeli line awaits 5 km of conductor stringing. Gantries, 33 kV equipment structures, and switchyard components are installed. Factory acceptance tests for transformers and control systems are done, with equipment being transported. Completion is expected by November 2025.

1.16 Arunkhola (Dumkibas) 132 kV Substation Project

This project aims to enhance power quality and reliability in Nawalparasi (Bardaghat Susta-East) district by constructing a 2x132/33 kV, 30 MVA substation at Tamang Gaun, Vinayi Triveni Rural Municipality, Ward No. 2, through a Loop-In Loop-Out arrangement with the Bardaghat-Sardi 132 kV DC transmission line. This will supply power to nearby industries and upcoming 33/11 kV substations, while 11 kV feeders will shorten existing lengthy feeders from Bardaghat and Kawasoti substations, improving voltage and reliability for areas like Dumkibas, Benimanipur, Arunkhola, and surrounding households. Funded by Asian Development Bank, the contract for design, supply, delivery, and construction was signed with M/s Godrej & Boyce Mfg. Co. Ltd., India, on 17 October 2022, effective from 16 December 2022.

As of July 2025, finishing works for the control room, staff quarters, vehicle shed, store, and boundary wall are ongoing. Equipment and gantry structure foundations are complete, and electrical components, including power transformers, isolators, bus post insulators, lightning arresters, CVTs, CT/PTs, and earthing for 132 kV and 33 kV switchyards, are installed. Control room panels, battery chargers, and 12 kV VCB panels are set up, with testing and commissioning in progress. The project is expected to be completed by the end of 2025.

33 kV Switchyard

1.17 Ghorahi-Madichaur 132 kV Transmission Line project

This project seeks to connect Rolpa district to the national grid and evacuate approximately 300 MW from Independent Power Producers at Madi Khola and Lungri Khola, including 50 MW from a solar project near Khungri Substation in Khungri village, integrating it into the Interconnected Nepalese Power System.

The project scope includes constructing a 40 km 132 kV double-circuit transmission line with ACSR CARDINAL from Ghorahi substation (Dang) to Khungri substation (Rolpa), spanning Dang, Pyuthan, and Rolpa districts, and building a 132/33/11 kV, 30 MVA AIS substation at Khungri, with two 132 kV bay extensions at Ghorahi.

As of July 2025, land acquisition for Khungri Substation and tower pads in Rolpa and Pyuthan is complete, with some disputes pending in Dang. Civil works, including boundary walls and protective structures, are finalized. The transmission line survey and Initial Environmental Examination are complete. The contract was signed with KEC International Limited, India, on 28 December 2023. Foundations for 55 of 122 towers are complete, 10 are under construction, and 15 towers are erected. Substation construction is 75% complete, with full completion expected by fiscal year 2082/83. The project costs USD 20 million.

Khungri Substation

Tower Erection at Dang District

1.18 Kohalpur-Nepalgunj 132 kV Transmission Line Project

The Kohalpur-Nepalgunj Transmission Line Project (KNTLP), initiated in FY 2075/76 (2018/19) and funded by Asian Development Bank with an estimated cost of USD 12 million, aims to enhance power quality and reliability in Banke district. It involves constructing a 132/33 kV, 2x63 MVA substation at Bakaspur, Janaki Rural Municipality, by looping in and out of the existing Kohalpur-Mahendranagar 132 kV DC line near Rangila Chowk, Kohalpur Municipality, Ward No. 15. The substation will supply power to Nepalgunj's industrial sector and nearby 33/11 kV substations, with two future bays to facilitate power exchange with India via 50 km double-circuit 132 kV transmission line from Nanpara, Uttar Pradesh. The project also includes 9 km double-circuit 132 kV transmission line using ACSR BEAR on multi-circuit towers. A 30-month contract was

awarded to M/s PowerChina SEPCO1 Electric Power Construction Co. Ltd., China, on 5 July 2023, effective from 3 September 2023.

As of July 2024, construction of the control room, guard house, staff quarters, and parking shed is underway. Switchyard foundation work for power transformers and lightning arresters is ongoing, with equipment drawings submitted for approval. Gantry and support structure designs are under review. Land acquisition for tower pads is nearly complete, and multi-circuit tower designs are being finalized. The project is expected to be completed by February 2027.

2. Distribution Line and Substation Department

Projects under Construction

The Distribution Line and Substation Department (DLSD) under the Project Management Directorate (PMD) oversees the implementation of 33 kV and lower voltage distribution line and substation projects. Additionally, it manages smart meter initiatives, data center projects, off-grid solar plants with Battery Energy Storage Systems (BESS) in Karnali, solar Viability Gap Funding (VGF), and electric vehicle (EV) charging station projects.

2.1 Distribution System Augmentation and Expansion Project

The Distribution System Augmentation and Expansion Project (DSAEP) was initiated to improve the reliability and efficiency of Nepal's electricity distribution network, reduce system losses, and enhance power quality across the country. The project is divided into three contract lots, each targeting different regions with varying scopes.

Lot-1 package focuses on eastern Nepal and was awarded to M/S A2Z Infra Engineering Ltd., India on 15 June 2016. The scope includes the construction of 13 new 33/11 kV substations, 167 km of 33 kV lines, 197 km of 11 kV lines, 165 km of 400/230 V lines, and the installation of 150 distribution transformers. So far, 9 substations have been commissioned, adding 67 MVA capacity, along with completion of 142km of 33 kV, 101 km of 11 kV, and 90 km of LV lines, and 45 transformers installed. The remaining work is scheduled for completion by the end of 2025.

Chisapani Substaion, Ilam

Lot-2 package covers western Nepal and was awarded to the same contractor on 15 July 2016. It involves 12 new substations, 181 km of 33 kV, 147 km of 11 kV, 140 km of LV lines, and 182 transformers. To date, 11 substations have been energized, contributing 63 MVA, with 165 km of 33 kV, 100 km of 11 kV, 67 km of LV lines, and 55 transformers completed. Completion is also targeted by end of 2025.

Lot-3 package is a nationwide reinforcement initiative awarded to M/S East India Udhyog Ltd., India on 22 February 2016. It includes upgrading 12 existing substations, constructing 87 km of 33 kV, 342 km of 11 kV, 365 km of LV lines, and installing 262 transformers. This lot is complete and already in successful operation.

Khairenitar Substation, Tanahu

2.2 Utility Scale Grid Tied Solar Project

The objective of this project is to support the development of grid-connected Solar PV projects in Nepal through Viability Gap Funding (VGF). The Government of Nepal (GoN) secured a grant from the Strategic Climate Change

Fund, administered by the Asian Development Bank (ADB) under the SASEC Power System Expansion Project.

In its initial phase, five solar power developers were selected through a competitive bidding process, and Power Purchase Agreements (PPAs) were signed to facilitate the procurement of solar energy from utility-scale grid-tied solar power plants totaling 24 MW in capacity. Out of these, three solar plants, with a combined capacity of 11 MW, have already been commissioned and are currently connected to the Nepal Electricity Authority (NEA) grid. The remaining two projects are in different stages of development.

2.3 Karnali Solar Energy Project

The purpose of this project is to carry out the design, engineering, supply, construction, installation, testing, commissioning, and operation & maintenance support of solar PV power plants with Battery Energy Storage Systems (BESS) in four districts of Nepal: Mugu (360 kW AC with 2200 MWh BESS), Dolpa (620 kW AC with 2000 MWh BESS), Jumla (950 kW AC with 3800 MWh BESS), and Humla (995 kW AC with 3000 MWh BESS).

Comprehensive topographical surveys, geo-technical investigations, and grid connectivity assessments have been completed for all four locations. Both the civil and electrical designs for each site have also been finalized. Construction activities have already commenced at the Jumla site, where work on the guard house, store house, retaining wall, BESS foundation, and road alignment is currently underway. Preparations for civil construction at the remaining three sites are expected to begin shortly.

2.4 Kathmandu Valley Central and Northern Distribution System Enhancement Project

The project aims to enhance and rehabilitate the 11 kV and 0.4 kV distribution systems primarily in areas served by the Maharajgunj Distribution Center in the northern region of Kathmandu Valley. The scope includes the design, supply, installation, and commissioning of an underground distribution network, along with necessary system reinforcement under the Maharajgunj Distribution Center.

A contract agreement was signed with KEI Industries Limited, India on 15 March 2019. To date, the project has achieved significant progress with the completion of approximately 117 km of trenching, 613 km of pipe laying, 210 km of high-tension (HT) cable, 340 km of low-tension (LT) cable, and installation of 2,441 foundations for feeder panels and RMUs. These works have been carried out in various locations including Maharajgunj, Lazimpat, Baluwatar, Bansbari, Budhanilkantha, Gongabu, Tokha, Dhumbarahi, Basundhara, and Samakhusi.

However, around 25% of the road section remains due to pending road-cutting permissions from the Department of Roads and local authorities. The project is targeted for completion by the end of 2025.

Installation of Distribution Transformer for commissioning of Underground Network.

2.5 Kathmandu Valley East and South Distribution System Enhancement Project

This project focuses on enhancing and rehabilitating the 11 kV and 0.4 kV distribution system with automation in areas under the Ratnapark Distribution Center. It includes the design, supply, installation, and commissioning of an underground network using trenchless boring technology, along with system reinforcement. Major works comprise 283 km of 11 kV XLPE cables, 382 km of 400 V XLPE cables, 84 km of underground optical fiber, and upgrading overhead 11 kV lines using AB cables. The contract was signed with KEI Industries Ltd., India on 15 March 2019. To date, 282 km of HT and 360 km of LT cables have been laid across key areas including Chabahil, Gaushala, Airport, Tinkune, Panipokhari, Lazimpat, Koteshwor, Nayabazar, Thamel, Garidhara, Dhobikhola Corridor, Teku, Tripureswor, Samakhusi, Lainchaur, Maitidevi, Dillibazaar, and Putalisadak. Cable laying, pipe installation, and RMU/panel foundation work continue. Delays due to COVID-19 and road cutting permissions have shifted project completion to end of 2025.and is expected to be completed by the end of 2025.

Indrachowk Area after dismantling of poles

2.6 Kathmandu Valley West Distribution System Enhancement Project

This sub-project, under ADB-funded Power Transmission and Distribution System Strengthening Project (Loan No. 3943-NEP), aims to upgrade and automate the 11 kV and 0.4 kV distribution systems in Kirtipur, Kuleshwor, Baneshwor, Balaju, and Jorpati Distribution Centers, using trenchless underground cable technology. It also includes service connection upgrades in Maharajgunj and Ratnapark areas.

The contract was signed with Larsen & Toubro Ltd., India on 24 June 2020, and became effective from 20 December 2020. The scheduled completion date is 30 June 2026. Key achievements include the approval of 50 HT feeders and 592 LT distribution designs, along with ongoing construction across major locations such as Kalanki to Thankot, Syuchatar, Chabahil to Ratopul, Baneshwor to Sankhamul, and Mulpani areas.

Progress highlights include installation of 129 RMUs, 538 feeder pillars, and 1300 service pillars. Additionally, 600 km of HDPE pipe, 385 km of HT/LT XLPE cables, and 18,000 service cables have been laid, with 90 RMUs, 280 feeder pillars, 850 service pillars, 225 km of XLPE cable, and 5,000 service cables already energized. Several UG sections including Jadibuti–Manohara and Balkhu–Soaltee have been completed and are now supplying electricity to NEA consumers.

HDPE pipe laying using HDD machine

2.7 Lalitpur Bhaktapur Distribution System Reinforcement Project

This project aims to modernize and enhance the power distribution system in the Lagankhel, Pulchowk, Bhaktapur, and Thimi Distribution Centers through infrastructure rehabilitation

and advanced automation. Key components include construction of 120 ckm underground 11 kV lines, 100 ckm of underground 400 V lines, and 120 km of underground optical fiber for automation. Additionally, 100 ckm of 11 kV and 120 km of 400 V overhead lines are being upgraded using AB cables. 200 Ring Main Units (RMUs) are being installed to boost system reliability, fault isolation, and service restoration.

Funded via an ADB concessional loan under the SASEC Power Transmission and Distribution System Strengthening Project, the contract was awarded to TATA Projects Ltd., India on 4 June 2021, effective from 9 September 2021, shall end on December 8, 2025.

Achievements to date include completion of network surveys, consumer indexing, soil investigations, civil material testing, and foundation design approvals. HT and LT network design for Bhaktapur and Lalitpur is complete. 70% of underground network erection in Bhaktapur and 3% in Lalitpur is done. The project has achieved 65.5% physical and 45.3% financial progress, with over 60% of materials delivered. Despite right-of-way and approval delays, the project remains on track, paving the way for a smarter, more resilient grid in the Kathmandu Valley.

RMU Commissioning at Bhaktapur

2.8 Pokhara Bharatpur Distribution System Reinforcement Project

The Pokhara–Bharatpur Distribution System Reinforcement Project (PBDSRP), funded by the Asian Development Bank under the SASEC Power Transmission and Distribution System Strengthening Project, aims to modernize and automate the 33 kV, 11 kV, and 0.4 kV distribution systems in Pokhara and Bharatpur. The contract, awarded to TATA Projects Ltd. (India) on 6 October 2021. Key achievements include laying over 140 km HDPE and 35 km PLB pipes, 106 km of HT & LT cables, 541 civil foundations, and 450 RMUs & LT Feeder Pillars in Pokhara. Over 50% of cables in 11 UG feeders are already energized. In Bharatpur, 152 km HDPE and 43 km PLB pipes, 31 km of 33 kV, and 79 km of 11 kV & LT cables have been laid, with 365 foundations and 317 RMUs & Feeder Pillars installed; 5 UG feeders are charged. With overall progress at 65%, most of the work in both regions is on track for completion within the year 2025/26.

HDPE laying with HDD machine in Pokhara

LT Feeder Pillar foundation in Pokhara

2.9 Rural Electrification and Distribution System Rehabilitation Project in Province No.2 (Madhesh Province)

This project plans sustainable energy access in Province No. 2 (Madesh Pradesh) by enhancing and reinforcing distribution networks. The project encompasses the construction of ten new 33/11 kV substations, along with 33 kV, 11 kV, and low-voltage distribution lines, plus rehabilitation of existing infrastructure across eight districts: Siraha, Saptari, Dhanusa, Mahottari, Sarlahi, Rautahat, Bara, and Parsa.

Awarded to M/s Tata Projects Limited on March 17, 2021, the project is divided into five lots:

Lot-1 covers six new substations and 65 km of 33 kV lines in Saptari, Siraha, and Dhanusa. Birendrabazar substation is operational; Mahendranagar and Nagrain are nearly completed; remaining three substations (Pansera, Sarlahi, Lohana) are under construction, targeting completion by September 2025.

Lot-2 includes four substations and 226 km of 33 kV lines across Mahottari, Sarlahi, Rautahat, Bara, and Parsa. Bardibas substation is charged; Manara substation is nearly completed and tested; Dokaila and Manpur are in progress. Several underground and overhead lines totaling approximately 86.5 km are operational or under construction, with completion expected this fiscal year.

Lot-3 involves 250 km of 11 kV and 320 km of 400/230 V lines plus installation of 170 distribution transformers in Saptari and Siraha. Approximately 5,500 PSC poles supplied; 40 km of line erected and strung.

Lot-4 targets 360 km of 11 kV and 350 km of 400/230V lines, and 175 transformers in Dhanusha, Mahottari, and Sarlahi, with 5,000 PSC poles supplied and 30 km of lines completed.

Lot-5 focuses on 340 km of 11 kV and 330 km of 400/230 V lines, and 175 transformers in Rautahat, Bara, and Parsa. About 2,000 PSC poles supplied; 30km of lines completed.

Equipment Testing at Manara SS

2.10 Distribution System Control and Data Center Project

The Distribution System Control and Data Center Project (DSCDCP), part of the Electricity Grid Modernization Project (EGMP), focuses on developing advanced control systems—including SCADA, Distribution Management System (DMS), and Outage Management System (OMS)—for Kathmandu Valley's underground electricity network, alongside establishing a Tier-III international standard Data Center for Nepal Electricity Authority (NEA). Located at NEA's Syuchatar Substation, the project contract was signed with M/S Yantai Donfang Wisdom Electric Co. Ltd, China, in July 2021 and construction began in November 2021.

The project integrates 30 Remote Terminal Units (RTUs) across Kathmandu's 24 distribution substations and selected sites in Kavrepalanchowk, Pokhara, and Chitwan, with installations completed at 17 locations. SCADA/DMS/OMS enables remote monitoring, control, and outage management via an optical fiber ring network supported by a 4G GPRS backup, ensuring reliable communication.

NEA's new Tier-III Data Center features 40 racks housed in prefabricated containers, including Network and Security Operations Centers and Building Management Systems, equipped with robust cooling, power, and security systems. The facility centralizes NEA's data processing, storage, and IT infrastructure, supporting ongoing projects like GIS Smart Grid and smart metering systems.

Inaugurated in June 2024, the Data Center is fully operational, with the Distribution Control Center commencing operations in June 2025. The project is near completion, with SCADA software active and ongoing DMS/OMS implementation, marking a major milestone in NEA's digital transformation and grid modernization efforts.

Distribution System Control and Data Center Building at Siuchatar, Kathmandu

2.11 Institutional Strengthening Project (ISP)

The Institutional Strengthening Project (ISP) aims to modernize NEA's operational functions through the adoption of advanced IT tools. The project supports the enhancement of management decision-making and operational efficiency through the implementation of key digital systems. Funded by Asian Development Bank (ADB) under the Electricity Grid Modernization Project - Additional Financing (EGMP-AF), ISP focuses on three major components: (i) Supply and Installation of a Revenue Management System (RMS), (ii) Supply and Installation of an ERP-based Integrated Financial Management Information System (IFMIS), and (iii) Engagement of a Project Management Consultant (PMC) to oversee implementation activities.

The RMS package has been contracted to M/s LongShine Technology Group Co. Ltd, China, and commenced on 12 March 2023. Major milestones including requirements gathering, system customization, data cleansing, and installation of IT infrastructure at NEA's Data Center in Syuchatar have been completed. The project is now preparing for the Pilot Go-Live phase of the RMS.

Project Objectives

The ERP-based IFMIS aims to establish an integrated platform for data collection, analysis, and enterprise-wide information sharing to address core business challenges. Key objectives include standardizing business processes, enhancing financial management, improving data security, enabling real-time reporting, and supporting well-informed, data-driven decisions across the organization.

The Project Management Consultant, M/s Deloitte Touche Tohmatsu India LLP, is currently assisting NEA in budgeting and RFP preparation for IFMIS and supervising the implementation of the RMS. ISP represents a strategic step toward NEA's digital transformation and operational excellence.

3. Social Safeguard and Environment Management Department (SSEMD)

Social Safeguard and Environment Management Department (SSEMD) under Project Management Directorate (PMD) was established on 23 February 2021 with the objective of safeguards implementation and compliance monitoring of projects implemented by PMD. The department is headed by a director and supported by dedicated environmentalists, sociologists, civil engineers, administrative, and other support staff.

Major interventions of SSEMD

1. Environmental studies and Monitoring (internal and external), Mitigation and Reporting of Safeguard activities of Transmission Line (TL), Substation (SS) and Distribution System Projects and implementation of Community Support Programs (CSP) under the PMD.
2. Preparation of Quarterly and Semiannual Environmental and Social Monitoring reports and submission to ADB
3. Arrange meaningful Public Consultation, Public Hearing, Trainings and Awareness Programs,
4. Ensure information records and data base of the safeguard implementation activities,
5. Implementation of Gender Equality and Social inclusion (GESI) related activities
6. Grievance redress and management (issue identification, documentation and status)
7. Other Environmental and Social Issues with RAP and rehabilitation.

Works completed by the department in FY 2024/25

- Third party External Social Monitoring and Evaluation Reports of SASEC-PSEP and PTDEEP completed and submitted to ADB
- Establishment of five Environmental and Social Management Unit (ESMU) at project sites of EGMP and EGMP-AF projects and mobilization of Environmental and Social safeguard officers.
- Safeguard Implementation and Mitigation Measures of Tanahun Rural Electrification Project completed as per the MoU with the project
- Skill development (Light vehicle and Electrical House Wiring) trainings for project affected families and Non-Timber Forest Products (NTFP) training to project affected Community Forests of Dadakhet-Rahughat 132 kV TL project (DRTLP) completed
- Citrus farming training and Awareness on GESI and Safe and Efficient Use of Electricity to PAF of Ghorahi-Madichaur 132 kV TL project (GMTLP) conducted
- Placement of Hoarding boards in DRTLP, GMTLP, Kohlpur-Nepalgunj 132 kV TL project (KNTLP), Chobhar-Patan Underground 132 kV TL project (CPUTLP) and Bhaktapur- Thimi 132 kV Underground TL project (BTULP)
- Light vehicle training in KNTLP, BTULP project conducted
- Mason training and Awareness on GESI and Safe and Efficient Use of Electricity to PAF of Borang –Naubise-Ratmate 220 kV TL project (BNRTLP)
- Awareness program conducted on Safe and Efficient Energy Use in GMTLP, KNTLP Pangtang Dumkibas S/S under EGMP and EGMP-AF projects
- Smart metering training to women electrical engineers under Power Transmission and Distribution Efficiency Enhancement Project (PTDEEP) and Customer Service training under EGMP project conducted
- Pangolin Management Action Plan for Dumkibas S/S implemented
- Safeguard Readiness Report for Nijgadh-Ramauli 400 kV TL and Dailekh-Kalikot-Jumla 132 kV TL of SASEC- Electricity Transmission and Distribution Strengthening Project (ETDSP) prepared and submitted to ADB
- Environmental and Social safeguards monitoring works and mitigation programs of different subprojects of EGMP and EGMP-AF are in process of implementation.

BUSINESS DEVELOPMENT DIRECTORATE

The Business Development Directorate, headed by the Deputy Managing Director, manages energy efficiency, loss reduction, power trading, and renewable energy studies. It consists of two departments—Energy Efficiency and Loss Reduction, and Power Trade—each led by a director, as well as the Company Management Division and Business Promotion Division. Administrative functions are handled by the Administration Section.

I. Energy Efficiency and Loss Reduction Department

The Energy Efficiency and Loss Reduction Department is dedicated to carrying out a range of activities aimed at improving the efficiency of both supply and demand sides of electricity distribution system. This department has been actively participating, supporting and collaborating with other Government organizations, NGOs and INGOs in developing and implementing energy efficiency policies and programs for the Government. Additionally, the department undertakes various tasks related to data collection, analysis, and reduction of technical and non-technical losses. These endeavors are being executed through three divisions.

A. Energy Efficiency Division

Smart Street Light Projects

National Street Lighting Promotion Project (NSLPP) under Energy Efficiency Division has been actively working to modernize and automate public street lighting infrastructure across various local bodies in Nepal. The initiative aims to replace outdated, inefficient and manually operated street lighting systems with automated and energy-efficient smart street lights. This move is critical not only to enhance night time mobility and public safety but also to support night-time economic activities and improve the urban aesthetics. Under the purview of the National Street Light Promotion Project, successful completion and operation of Smart Street Light projects have been achieved in Bharatpur Metropolitan City, Kathmandu Metropolitan City, Lalitpur Metropolitan City, Pokhara Metropolitan City, Dhangadhi Sub Metropolitan City, Belaka Municipality, Bhimdutta Municipality,

Completed Smart Street Lights Project

Project Location	Smart Street Lights (nos)	Mast Lighting (nos)
Metropolitan City		
Bharatpur	1865	8
Kathmandu	2090	0
Lalitpur	2045	12
Pokhara	2011	12
Sub-Metropolitan City		
Dhangadhi	432	0
Municipality		
Belaka	54	2
Bhimdutta	29	6
Bhimeshwor	75	2
Budhanilkantha	1165	0
Kankai	138	4
Madhyapur Thimi	442	0
Mahalaxmi	384	0
Manthali	265	2
Phidim	216	0
Siddharthanagar	275	5
Rural Municipality		
Sunapati	331	3
Total	**11817**	**56**

Bhimeshwor Municipality, Budhanilkantha Municipality, Kanakai Municipality, Mahalaxmi Municipality, Manthali Municipality, Phidim Municipality, Siddharthanagar Municipality, Sunapati Rural Municipality and Arniko Highway (Tinkune-Suryabinayak).

This project is uniquely structured as a jointly funded initiative between NEA and different local bodies and institutions, reflecting a strong spirit of inter-agency collaboration. NEA is responsible for the end-to-end execution of the project—from procurement and technical supervision for installation and quality assurance—ensuring that all works adhere to defined standards and specifications. Once installation is complete, the operation of the street lighting systems will be formally handed over to the respective local bodies, empowering them to manage the system locally while receiving continued technical support from NEA.

To ensure the long-term functionality and performance of the systems, the project includes:

- A five-year warranty on the installed equipment.
- An Annual Maintenance Contract (AMC) managed by the contractor, in close coordination with NEA and local authorities.

This collaborative model not only ensures a robust and high-quality infrastructure from the outset but also guarantees sustained performance and reliability through proactive maintenance throughout its lifecycle.

Ongoing Smart Street Lights Project

Project Location	Smart Street Lights (nos)	Mast Lighting (nos)
Bharatpur II	3740	83
Street Lights Project Tender 1*	3622	43
Street Lights Project Tender 2**	2807	83
Ring Road-Lalitpur	1262	46
Total	**11431**	**255**

** Lalitpur, Kirtipur, Madhyapur Thimi, Tokha, Mahalaxmi, TU Kirtipur, Godawari, Ratnanagar*

*** Dhangadhi, Baglung, Barahathawa, Galyang, Resunga, Sainamaina, Sworgadwari, Samudayik Chikitsalaya (Nawalpur), Kanchan, Kohalpur, Khaniyabas, Ruru, Musikot, Chhatradev, Siddarthanagar*

So far, 11,817 smart streetlights and 56 Mast lights have been installed in 16 local bodies in Nepal. The scale of this rollout demonstrates the importance and impact of the project nationwide.

Currently, NEA has been conducting several street light projects with project site scattered in the local bodies with a target of installation of additional 11,431 smart streetlights and 255 mast lights.

Upon the request of several other local bodies, the project has been doing the initial survey, estimate and design of the project and also preparing documents for supply/installation of smart street lights accordingly. Apart from this, the project has also been conducting several design related research on façade and architectural lighting for monumental and historical places of Nepal.

Smart Street Lights in Kathmandu

Smart Street Lights in Pokhara

High Mast Lighting in Lalitpur

Public Charging Station:

A **Public Charging Station (PCS)** may only be commissioned after the electrical and network components have been thoroughly examined and certified as adequate by qualified inspectors or technical personnel. For the continued operation and management of such stations, **one or more engineers authorized by NEA**—either from the NEA itself or a third-party agency accredited by the NEA—must be formally designated. Under the current legal provision, **Energy Efficiency and Loss Reduction Department** is entrusted with the responsibility of inspecting and verifying the technical suitability of public electric vehicle charging station. In the current fiscal year, the department has facilitated the **installation of approximately 750 public charging stations** through coordination with various DCS offices.

It has been proposed that the **approval and recommendation process** for public charging stations be decentralized through NEA's **provincial offices**. This means that any company, institution, firm, or individual intending to establish a PCS will be able to seek and obtain direct approval from the respective NEA provincial office. Following successful technical inspection and verification, the provincial office will issue a **letter of recommendation** to the concerned **DCS** for further action. Based on this, the DCS will initiate the construction of the required **High Tension (HT) line**, arrange for the installation of a **transformer up to 200 kVA**, and provide a **Time-of-Day (TOD) energy meter** at the PCS site, in accordance with the specified demand.

Public Charging Station in Bardha Portha, Saptari

Public Charging Station in Butwal, Rupandehi

B. Loss Reduction Division

Electricity Loss Reduction Division is one of the focal component of **Energy Efficiency and Loss Reduction Department** for electricity loss reduction monitoring. This division is conducting activities like random as well as planned inspection of energy meters and field raid operation wherever and whenever required. Division is dedicated towards supporting additional revenue generation by controlling electricity theft, pilferage, tampering, demand leakage, CT/PT outage, and loss due to oversized transformers in LT consumer, wrong MF calculation and energy meter connection. It also conducts data download and analysis of TOD meters of Distribution Centers in co-ordination with TOD section.

The division is assigned for the following tasks;

- Preparing Energy Losses Standards within NEA business
- Inter Branch Metering
- Calibration of Metering Units
- Identification of technical losses within NEA Business and corrective Actions
- Cross checking/Inspection of High Consumption consumers

Hooking from Street light

Hooking in Lahan DC



Photo showing Loss reduction activities carried out by Electricity Loss Reduction Division in Madhesh Province

In Fiscal Year 2081/082, the division had carried out inspection of 629 number of energy meters which includes single phase electro-mechanical/digital meter, three phase whole current/digital meters and TOD Meters under various provincial offices. Focus has been given to high energy consumption consumers.

C. Safety Management Division

To address rising incidents related to unsafe electrical operations, negligence, and lack of public awareness, NEA is to initiate a dedicated safety enhancement program under the Safety Management Division (recently formed under the Business Development Directorate). The goal is to protect NEA infrastructure at multiple tiers or levels and reduce casualties among field staff and the general public through structured safety guidelines, capacity building, and public outreach.

In this fiscal year (2082/83), NEA will:

- Develop comprehensive electrical safety standards and guidelines based on national and global practices (CEA India, OSHA, IEC).
- Development of trainers by participating in different national and international training related to electrical safety
- Launch training programs for safety officers, engineers, and field technicians by trainer/trainers.
- The safety programs are not only limited to personnel but also NEA's facilities
- Conduct public awareness campaigns in high-risk areas, schools, and the public.
- Conduct pilot public engagement program
- Perform a PPE and safety equipment audit and recommend upgrades.
- Monitor and evaluate safety implementation in select divisions.

This initiative is aligned with NEA's commitment to safety-first operations.

II. Power Trade Department

Power Trade Department oversees the trading of electric power in both domestic and across the border. It serves as the main interface of NEA with Independent Power Producers (IPPs) for handling their applications for Power Purchase Agreement (PPA). The department's functions are categorized into three main areas: processing and signing of PPAs, administration of PPAs before and after commercial operation begins.

In the fiscal year under review, several reforms were introduced to streamline and increase transparency in the PPA application process. Applications are processed sequentially based on pre-defined criteria. This involves stages such as document screening, technical review, grid impact studies leading to grid connection agreements, preparation and negotiation of PPA drafts, seeking approval from NEA management, approval from the Electricity Regulatory Commission (ERC), and finally, signing the PPA.

In FY 2081/82, a total of 434.125 MW of power was connected to the national grid. PPAs were signed for 932.031 MW from 31 hydropower projects and 170 MW from 8 solar projects. The status of Energy Mix for signed and processing PPAs as of FY 2081/82 is as detailed below:

	PPA Signed		PPA Processing	
	No.	Installed Capacity (MW)	No.	Installed Capacity (MW)
ROR	402	6720	152	3889
PROR	51	4196	40	6231
Storage	1	140	6	5117
Bagasse	2	6		
Solar	38	375	55	790
Total	494	11,436	253	16,027

To promote fairness and transparency in the PPA for Solar Power Projects, NEA has, in recent years, adopted a tariff-based competitive bidding mechanism for procuring power from grid-connected solar PV projects. In FY 2081/82, NEA selected 63 projects with a combined installed capacity of 960 MW through this competitive approach. Of these, PPAs have been signed for 8 projects totaling 170 MW in the current fiscal year. The remaining PPAs are expected to be signed in the upcoming FY.

Since May 1, 2021, Nepal has been actively participating in the Indian Power Exchange (IEX), facilitating both import and export of electricity. On November 3, 2021, Nepal began power exports to India through NTPC Vidhyut Vyapar Nigam (NVVN) via Indian Energy Exchange (IEX).

NEA has signed two medium-term agreements with NVVN for supplying 200 MW under each agreement to Haryana Discoms for 5 years. Additionally, NEA has another medium-term agreement for supplying up to 200 MW to Bihar State Power Holding Co. Ltd. via Nepal-Bihar's 132 kV transmission infrastructure for 3 years (extendable up to 5 years).

This FY, a significant milestone was set as NEA, NVVN and Bangladesh Power Development Board (BPDB) signed a Tripartite Agreement for the sale of 40 MW of power from Nepal to Bangladesh through Indian Territory. Under the landmark agreement, 40 MW of power has been successfully flowing from Nepal to Bangladesh through Dhalkebar – Mujaffarpur – Baharampur – Bheramara transmission network.

Significant progress was also noted in Cross Border Power Trade during FY 2081/82, with approved export quantum reaching 936.72 MW to date. Details are provided in the table below:

Status of Approval for Sale of Power to India and Bangladesh

	No.	Approved Quantum (MW)	TL Network
Indian Power Exchange Market (DAM/RTM)	9	451.62	Dhalkebar-Mujaffarpur, 400 kV TL
	2	70.00	Tanakpur-Mahendranagar, 132 kV TL
Medium Term Bilateral Agreement (Nepal and India)	15	375.10	Dhalkebar-Mujaffarpur, 400 kV TL; Bihar/UP-Nepal 132 kV TLs
Medium Term Bilateral Agreement (Nepal and Bangladesh)	2	40.00	Dhalkebar-Mujaffarpur, 400 kV TL;
Total	28	936.72	

Business Promotion Division

Established in April, 2024 under the Business Development Directorate, the Business Promotion Division focuses on:

a. Commercializing NEA land

b. Commercializing transmission and distribution lines

c. Internet, cable carrier, and data center businesses

d. Providing consulting services by expert personnel

e. Reviewing and exploring optical fiber, cable net, and advertisement businesses

f. Ensuring regulatory compliance in related areas

g. Studying, executing, monitoring, and evaluating hydrogen development

Exploring new business opportunities and innovations

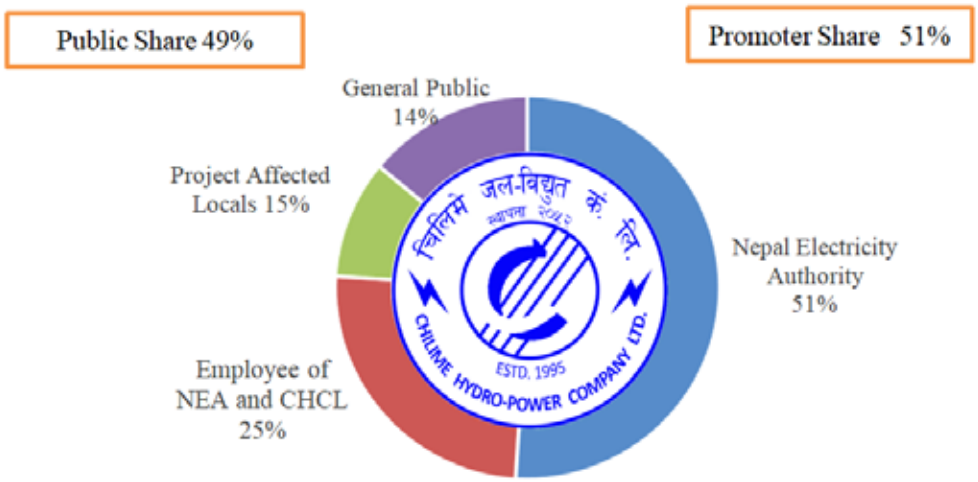
D. Company Management Division

Established in April, 2024 under the Business Development Directorate, the Company Management Division oversees coordination and monitoring between NEA and its subsidiary companies involved in power generation, transmission and trade. To date, NEA has 18 subsidiary companies.

1. CHILIME HYDROPOWER COMPANY LIMITED

Chilime Jalavidyut Company Limited (CHCL) was incorporated in 1995 as the first subsidiary company of NEA with the objective of hydroelectricity generation through optimal utilization of resources available within the country.

CHCL owns and operates a power plant with 22.1 MW installed capacity which was commissioned on August 25, 2003 and is located in Rasuwa District. Nepal Electricity Authority holds majority ownership with 51% shareholding and remaining 49% shareholding is from general public including 10% equity ownership of project affected local people. The shares of the Company are listed and traded on the Nepal Stock Exchange Limited (NEPSE). The detailed initial structure of Equity of CHCL is as below. However, the 19th AGM passed the resolution to merge the different groups into two groups namely Promoter (NEA) and General Public Group.



Share Structure

With the objective of further development of hydropower, CHCL has invested in other hydroelectric projects through four hydropower companies namely Sanjen Jalavidhyut Company Ltd. (SJCL), Madhya Bhotekoshi Jalavidhyut Company Ltd. (MBJCL), Rasuwaghadi Hydropower Company Ltd. (RGHPCL), Chilime Seti Hydropower Company Ltd. (CSHC) and one consulting company namely Chilime Engineering & Services Companies Ltd. (ChesCo). ChesCo is carrying out the feasibility study of three proposed hydroelectric projects having the total capacity of 219 MW.

Similarly, CHCL successfully completed the construction of its own office building named as Chilime Tower at Dhumbarahi, Kathmandu and has started operation of corporate office from Chilime Tower from June 15, 2025.

2. UPPER TAMAKOSHI HYDROPOWER LIMITED

Upper Tamakoshi Hydropower Limited (UTKHPL) was established on 09 March 2007 as a subsidiary of NEA for the construction and operation of Upper Tamakoshi Hydroelectric Project. The Project was completed and commissioned successfully in 2021 utilizing domestic financial resources. The promoter shares (51%) of the company belong to Nepal Electricity Authority, Nepal Telecom, Citizen Investment Trust and Rastriya Jeevan Beema Company Ltd. with stakes of 41%, 6%, 2% and

2% shares respectively. The remaining 49% shares is held by general public.

Upper Tamakoshi Hydropower Plant (UTKHPP):

UTKHPP, one of the national pride project of Nepal, is located in Bigu Rural Municipality, Ward No.1 of Dolakha district in Bagmati Province of Nepal. The Plant is a daily peaking run-of-the river project with installed capacity 456 MW with a live storage volume sufficient for four hours daily peaking operation in the driest month with average annual energy generation of 2,281 GWh with the available gross head of 822 m and design discharge of 66 m3/s. The Commercial operation of Plant was achieved on 20th August, 2021 (4th Bhadra, 2078).

Major Natural Disaster and Power Generation:

UTKHPP encountered a severe disaster in the fiscal year 2081/82 due to intense flooding and landslides at the Headworks site on 12th Asoj, 2081 (27th September, 2024). The incident caused significant damage to critical infrastructure, including desander basins, the Box Culvert, Surface control room, access roads, and 220 kV transmission tower. Tragically, the event claimed the lives of two plant employees and two security personnel.

As a result, power generation was completely halted from the evening of 27th September, 2024, leading to an 88 days complete Plant shutdown. Restoration works were initiated immediately and the Left Settling Basin was repaired and brought back into operation of the Plant with partial generation resumed on 9th of Poush 2081 (25th December 2024). However, the Right Settling Basin and Box Culverts remain partially damaged. Currently, the Right Settling Basin is operating in a limited capacity under RoR mode after temporary structural management. Full-scale repair works are planned to resume after the current monsoon season, with the aim of restoring full supply and peaking operation capability.

The disaster caused huge financial impact to the company at around 2 billion, and insurance claims have been submitted to cover damages to civil structures, electromechanical equipment and loss of profit. Full rehabilitation of the damaged structures is expected to be completed within FY 2082/83.

Despite this disruption, the plant successfully generated a total of 1,529.07 GWh of energy in fiscal year 2081/82. However, the delivered energy in the fiscal years 2080/81 and 2079/80 were 2,058.36 GWh and 1,945.83 GWh respectively. The Plant is supplying maximum power of 456 MW in the peak time of morning and evening even in the dry season, and has contributed to the country's power sector by enabling substantial reduction of the power import from India.

Rolwaling Khola Hydroelectric Project (RKHEP):

As the second stage development of UTKHEP, the Company is implementing Rolwaling Khola Hydroelectric Project (RKHEP) having installed capacity of 22 MW. The Company obtained generation license on 3rd April, 2023 whereas Environmental Impact Assessment (EIA) Report was approved on 19th June, 2022.

Apart from 105 GWh of annual energy generated from this power plant itself, additional 213 GWh of annual energy will be generated from UTKHPP by using the tailwater of RKHEP during the season when the river discharge of Tamakoshi River gets below 66m3/sec. which will enhance energy of UTKHPP and increase peaking hours from 4 hours to 6 hours even in the dry season.

RKHEP is located in Bigu and Gaurishankar Rural Municipalities, Dolakha district. The headworks and intake lie in Gaurishankar Rural Municipality that is 6.5 km north east of UTKHEP powerhouse at Gongar. The powerhouse is located in Bigu Rural Municipality, Lamabagar village on the left bank of Tamakoshi River.

The agreement for the single package EPC Construction of the project was signed with the Contractor SSCE-High Himalaya JV on 4th November, 2022. The Contractor has completed excavation of 900 m of Headrace Tunnel, around 350 m of Main Access Tunnel, 414 m of Adit tunnel-2, 700 m Diversion Tunnel, 215 m of tailrace Tunnel, 98 m of Tailrace Adit tunnel and approx. 40 m of Powerhouse Cavern.

Since there is no road access to the headworks and other work front, construction equipment were airlifted. Portal Excavation of the Adit-1, Mule Track Construction, camp area development and Track Opening of connecting Road from Camp area to the Adit-1 Portal has also been completed. Ropeway for transportation of the construction materials at Adit-1 area and infrastructures is under construction. The winch with pay load of 500 kg capacity and approx. 1490m long is already in operation from Kabhre Cliff near road tunnel to Rikhu village. Kabhre is one of the end stations of this winch which is accessible by Singati – Lamabagar Road. Survey and design of the Gongar - Lamabagar 33 kV Double Circuit Transmission line is in the final design stage. A total of 125 ropanis land required for this project have also been acquired till date. Land acquisition for the Transmission line is yet to be processed.

3. TAMAKOSHI JALVIDHYUT COMPANY LIMITED

Tamakoshi V Hydroelectric Project (TKVHEP), developed by Tamakoshi Jalvidhyut Company Limited (TKJVC), is a cascade development of the Upper Tamakoshi Hydroelectric project (UTKHEP) developed by Upper Tamakoshi Hydropower Limited, and operates in tandem with it. The project is situated in Bigu Rural Municipality, Dolakha District, Bagmati Province. The road connecting Singati Bazaar and Lamabagar, which was constructed for UTKHEP passes through both the powerhouse and headwork sites of this project. Feasibility study of the project was carried out by NEA in the FY 2010/11. The project being a cascade development to UTKHEP, it takes necessary design discharge from the tailrace of the UTKHEP through an underground inter-connection arrangement and conveys to headrace tunnel. An underground powerhouse is proposed at Suri Dovan. The design discharge of the project is 66 m3/sec and has installed capacity of 99.8 MW. The project is expected to generate about 543 GWh energy annually.

Project Activities

a. Environmental Concerns

The updated the Environmental Management Plan (EMP) Report of the project was approved on 2081/05/19 by Ministry of Forest and Environment (MoFE). The project has submitted a request for public land utilization and tree cutting approval from the concerned ministry through DoED. The process is on the verge of completion.

b. Construction Activities

Lot 1: Contract for Civil Works and Hydro-mechanical Equipment was awarded to the Contractor Sinohydro-KSNS JV, China on 2081/01/28. The following are the ongoing list of activities under Lot 1.

A. Preparatory Works

The construction of contractor's camp near headworks and powerhouse area; Bunker near the headworks area as well as the construction and installation of Batching and Crusher Plant has been completed.

Permanent Camp Facility

B. Temporary Works

- The construction of Access Road to Adit-2 and Adit-4; to Main Access Tunnel (MAT), Cable & Ventilation Tunnel (CVT) has been completed.
- The excavation of Adit-1 and the Connecting Tunnel to the Spillway has been completed, while the excavation of Adit-2 and Adit-4 is 54% and 58% complete, respectively.
- The construction of Bailey Bridge over Tamakoshi River near Adit-2 has been

completed and the Bailey Bridge over Tamakoshi River near Adit-3 is under construction

C. Permanent Works

- 64% Excavation completion of the connecting tunnel to the Headpond structure and 30% completion of the first-layer excavation of the Headpond structure.
- 61% of the tunnel excavation to the Transformer Cavern (TRC) and 23% of the tunnel to the Horizontal Pressure Shaft have been completed.
- The MAT and CVT excavations are nearing completion, with progress at 96% and 82%, respectively.

c. Procurement Activities

The tender document for Lot 2 i.e. Electromechanical and Transmission Line Works, which was floated on 2081/02/17 was cancelled due to overpriced bidding by the bidder. The cost upgradation work is ongoing.

d. Physical and Financial Progress

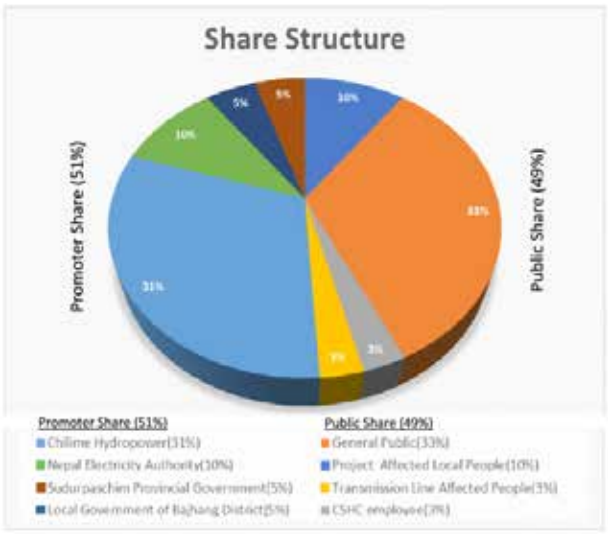
Physical progress includes land acquisition, infrastructure development (access road, camp facility, construction power, etc.), construction of hydraulic structures (headworks, tunnel, surge tank, powerhouse, tailrace, etc.), hydro-mechanical works, electromechanical works, transmission line construction, etc. The overall construction progress of the project till the end of FY 2081/82 is about 15.34%.

The estimated construction cost of the project is about NRs. 21,139,582,958.00. The finance of the project is managed by the tripartite loan agreement between TKJVC, NEA and EPF. The debt equity ratio for construction is 65:35. The overall project expenditure at the end of FY 2081/82 is about NRs. 2,74,95,78,950.00. The overall financial progress of the project at the end of FY 2081/82 is about 12.47%. Financial and physical progress of the project for FY 2081/82 as per the target is 80.53% and 80.43% respectively.

4. CHILIME SETI HYDROPOWER COMPANY

Chilime Seti Hydropower Company (CSHC) was established on August 18, 2022, as an associate of Chilime Hydropower Company Limited. The main promoter, Chilime Hydropower Company Limited (CHCL) is primarily owned by NEA, holding a substantial 51% shares. CSHC was formed with the objective of developing the Seti Nadi-3 Hydroelectric Project (SN3HEP) having an installed capacity of 87MW, located in Bajhang District of Sudurpashchim Province. The Department of Electricity Development (DoED) has granted a Generation License in FY 2081/082.

Share structure:



Promoter Share: NEA holds 10% and CHCL holds 41%, including 5% allocated to the Sudurpaschhim Provincial Government and 5% to the Local Levels of Bajhang District. Once confirmed, CSHC will release these shares accordingly.

Public Share: The public share portion constitutes 49%, allocated 33% to the general public, 10% to project-affected local people, 3% to transmission line-affected people, and 3% to CSHC employees.

Seti Nadi - 3 Hydroelectric Project is a part of the 'Janatako Jalbidhyut Karyakram' under the Ministry of Energy, Water Resource, and Irrigation (MoEWRI), Government of Nepal (GoN). Currently, the company is in the process of finalizing financial closure to manage the necessary debt capital for the project. Under

equity investment, CHCL and NEA have invested NRs. 58,18,36,400 and NRs. 19,99,99,000 respectively.

Salient Features of the Project:

Project Name	: Seti Nadi – 3 Peaking Run Off River Hydroelectric Project
Project Location	: Jayaprithvi Municipality, Bajhang District, Sudurpaschhim Province
River	: Seti Nadi
Capacity	: 87 MW
Weir	: Length 67m and height 16m, Radial Gated Weir of size 10 m x 11 m (B x H) (4 Nos.)
Undersluice	: Orifice (Radial Gate) type, size 10m x 13m (B x H) (1 No.)
Settling Basin	: Surface – 3 Nos (125 x 16 x 21) (L x B x H)m
Headrace Culvert	: 1069.8 m length, width and height of 6 x 6 m (1 No.)
HRT	: 4251 m length with dia. 6.2m, Horse Shoe shaped
Surge Shaft	: 65.3 m height with dia. of 15m
Pressure Shaft	: 155.5m length with 4.7 m dia.
Powerhouse	: 74m x 16m x 41m Underground
Tailrace	: 452m length with 6 m dia.
Turbine	: Vertical Shaft Francis (3 units)
Transmission Line	: 12Km, 132 kV Double Circuit., Station: Kailash
Total annual energy	: 483.206 GWh
Off-peak dry energy	: 133.719 GWh
Peak dry energy	: 14.67 GWh
Wet season energy	: 334.819 GWh

Project Status and Progress:

The Seti Nadi–3 Hydroelectric Project has entered its final implementation task from its initial phase, showing significant progress this year in the following areas:

- The Feasibility Study Report and the Environmental Impact Assessment (EIA) have been completed. An international expert has conducted site visit for the technical assessment of the project, and the process of submitting the final DPR is currently underway.
- Land acquisition is almost complete, with 95.98% of the required land secured. The processes for leasing forest land and government land are currently underway. To secure the acquired land of the project, boundary demarcation has been completed by installing concrete pillars.
- The Generation License has been obtained.
- The Connection Agreement has been finalized, while the Power Purchase Agreement (PPA) is under processing with NEA.
- An updated Memorandum of Understanding (MoU) was signed on July 13, 2025, with the Rastriya Prasaran Grid Company Limited (RPGCL) to connect the electricity generated by the project to the national transmission grid.
- Financial closure is in progress in coordination with HIDCL. The process of obtaining investment approval from the Office of the Investment Board, Government of Nepal, is ongoing.
- The construction of office and residential buildings is under process, with the consultant having submitted the required documents.

5. MODI JALVIDYUT COMPANY LIMITED

Modi Jalvidyut Company Limited, a subsidiary of Nepal Electricity Authority, was established to develop the Upper Modi 'A' Hydroelectric Project (UMAHEP) and the Upper Modi Hydroelectric Project (UMHEP) having an installed capacity of 42 MW and 18.2 MW respectively. Both projects are located in the Annapurna Rural Municipality of Kaski District, about 250 kilometers west of Kathmandu, and are designed as a cascade development along the Modi River.

All pre-construction activities for both UMAHEP and UMHEP have been fully completed. These include securing generation licenses from the Department of Electricity Development, obtaining all necessary environmental approvals—such as the Environmental Impact Assessment (EIA) for UMAHEP, the supplementary EIA for UMHEP, and the Initial Environmental Examination (IEE) for the transmission line and signing power purchase agreements (PPA) for both projects. Financial closure for both projects has also been achieved: the Syndicated Loan Agreement (SLA) for UMHEP and the Supplementary Syndicated Loan Agreement (SSLA) for UMAHEP have been duly signed, with financing arranged through a consortium of NMB Bank Limited, Hydroelectricity Investment and Development Company Limited (HIDCL), and Sanima Bank Limited.

Land acquisition has been completed for both projects, with 206.08 Ropani of private land secured for UMAHEP, 47.87 Ropani for UMHEP, and 223 Ropani of government land obtained. An equivalent area of private land was also acquired and transferred to the Government of Nepal. All government land use and tree clearance permissions have been received, and tree clearance work is nearly finished.

For UMAHEP, construction of civil and hydro-mechanical works (Lot-1) has commenced following the completion of all preparatory works. For UMHEP, the contract for civil and hydro-mechanical works (Lot-1) has been awarded, and construction activities are ongoing, with preparatory works currently in progress. Regarding electromechanical works (Lot-2), the package for UMAHEP will be re-tendered in the coming fiscal year, while the tender for UMHEP's electromechanical works (Lot-2) will also be issued in the coming fiscal year. For the transmission line, all required studies and permits have been obtained, and the tender is planned to be published in the coming fiscal year.

Construction of camp facilities at Syauli Bazar, Ghandruk, is nearing completion, with all major structural work finished and only finishing works remaining. Both UMAHEP and UMHEP are now entering the full construction phase, backed by consulting support from NEA Engineering Company Limited. Modi Jalvidyut Company Limited remains committed to timely project delivery and contributing to Nepal's growing energy security.

6. MIDDLE BHOTEKOSHI HYDROELECTRIC PROJECT (102 MW)

Madhya Bhotekoshi Jalavidyut Company Ltd. (MBJCL) is a public limited company promoted by Chilime Hydropower Company Ltd. & Nepal Electricity Authority to develop 102 MW run-of-river, Middle Bhotekoshi Hydroelectric Project (MBKHEP) in Sindhupalchok. Chilime Hydropower Co. Ltd. holds 37%, Nepal Electricity Authority 10% and local companies 4% promoter shares and remaining 49% of shares are held by the public including those from affected areas. Debt financing is provided by the Employer's Provident Fund (EPF) of Nepal.

Salient Features of the project:

Type of Project:	Run-of-River
Design flow:	50.8 m^3/sec
Gross Head:	235 m
Number of Units:	Three (3)
Installed Capacity:	102 MW (3 x 34 MW)
Annual Energy:	542.2 GWh
Transmission Line:	4 km/220 kV Single Circuit
Project Cost:	NRs. 15.03 billion (excluding IDC)

Unit 1 Wet Testing

Powerhouse

All the major works of Civil, Hydro-mechanical, Electro-mechanical and Transmission line has been completed, and the wet commissioning test is ongoing. Due to the delay in the completion of the main power evacuation infrastructure i.e. Barhabise Substation, the project is proceeding with contingency power evacuation arrangement through New-Khimti Substation, which is planned to be completed within mid of August, 2025.

7. SANJEN JALAVIDHYUT COMPANY LIMITED

Sanjen Jalavidhyut Company Limited (SJCL), established in 2010 AD, is a subsidiary of NEA and Chilime Hydropower Company Limited (CHPCL) with promoter shares of 10.36% and 39.36% respectively. SJCL has developed two hydroelectric projects namely, Sanjen (Upper) Hydroelectric Project (SUHEP) (14.8 MW) and Sanjen Hydroelectric Project (SHEP) (42.5 MW) in cascade with the financing arrangement of 70:30 debt equity ratio. All the debt portion (70% of total) has been arranged from Employer's Provident Fund (EPF) of Nepal. The equity shares from promoters and also shares from depositors of EPF, Employee of EPF, staffs of promoters and General Public including project affected local people have been already paid up.

Sanjen (Upper) Hydroelectric Project (SUHEP) – 14.8 MW:

The project is located in Amachhodingmo Rural Municipality (previously Chilime VDC). The headwork of this project is located in Tiloche and powerhouse is in Simbu Village. The project has approximately 161 m gross head and design discharge of 11.07 m3/s. Total annual saleable energy of this project is 82.44 GWh. The total energy generated by SUHEP since its operation began is 90.79 GWh as of Ashadh, 2082.

Powerhouse

Switchyard

Sanjen Hydroelectric Project (SHEP) – 42.5 MW:

This project is a cascade project of SUHEP and has gross head 442 m. An additional discharge of 0.5 m^3/s from Chhupchung Khola is added, resulting in a total design discharge of 11.57 m3/s. The commercial operation of SHEP commenced on December 16, 2024 (Poush 01, 2081). This project is under operation with annual total energy of 251.94 GWh and annual salable energy of 241.86 GWh. The total energy generated by SHEP since its operation began is 96.96 GWh as of Ashadh, 2082. At present, reconciliation works of various contracts has

been completed and contract closures works of the project is underway.

Transmission Line

The power generated from both plants is being evacuated through SJCL's 132 kV transmission line to the Chilime Hub substation and then integrated into the national grid via the Chilime-Trishuli 220 kV transmission line.

8. DUDHKOSHI JALVIDYUT COMPANY LIMITED

The Dudhkoshi Jalvidyut Company Limited (DKJVCL) was established on 3rd March, 2017, as a subsidiary of the Nepal Electricity Authority (to implement the Dudhkoshi Storage Hydroelectric Project (DKSHEP).

DKSHEP is a 670 MW seasonal reservoir-based project, designed to utilize the waters of the snow-fed perennial Dudhkoshi River, which originates from Mount Everest and its surrounding Himalayas. The Dudhkoshi River, a tributary of the Saptakoshi River System, joins the Sunkoshi River near Ghurmi and Harakpur Bazaar. The project's main dam will be constructed approximately 1 kilometer southwest of Rabuwa Bazaar, a small market on the left bank of the Dudhkoshi River at the border of Okhaldhunga and Khotang Districts. The main 600 MW powerhouse will be an underground facility on the left bank of the Sunkoshi River near Dhitung village in Halesi Tuwachung Municipality, Ward No. 8, Khotang District. The 70 MW Dam-Toe powerhouse, also underground, will generate energy from environmental flow release and is proposed at Chisankhugadhi Municipality, Ward No. 6, in Okhaldhunga District. A 220-meter-high concrete-faced rock-fill dam (CFRD) will create a 31.5-kilometer-long reservoir with a capacity of 1,581 million cubic meters. The dam site is located approximately 210 kilometers east of Kathmandu by road.

For the main 600 MW powerhouse, a natural head of 132 meters will be available from a 13.15-kilometer-long main water tunnel, supplemented by an additional 210-meter artificial head from the reservoir. The design discharge for the main powerhouse is 224.4 m3/s. The Dam-Toe Powerhouse is designed to operate with a rated head of 182 meters and a design discharge of 40 m^3/s.

It is projected to generate a substantial 3,377 GWh of energy annually. This output is divided seasonally, with an average of 1,252 GWh produced during the dry season and 2,125 GWh during the wet season. The electricity from the main 600 MW powerhouse will be integrated into the National Grid via an 81 kilometer-long 400 kV Transmission Line, extending to the Dhalkebar Substation. Similarly, power from both the 70 MW Dam-Toe Powerhouse and a future 200 MW Dam Power House will be transmitted through 400 kV Transmission Lines to the New 400 kV Dam Toe Switching Station, located approximately 1.5 kilometers from these powerhouses(Step-up transformers at generation points will directly rise voltage to 400 kV).

The Updated Feasibility Study and Detailed Design of the Project and preparation of Bidding Documents along with EIA Study are being carried out by ELC Electroconsult (Italy) in association with NEWJEC Inc. (Japan), under the grant assistance of Asian Development Bank (ADB). The Draft Detailed Design Report was submitted in January 2020 which have been reviewed by the Panel of Experts (PoE) and ADB experts. PoE provided the Final report in October, 2024 and the Consultant submitted the Final Detailed Design Report on November, 2024. However, some modifications for the Dam Toe Powerhouse and the correction of inconsistencies are necessary within the report, and these efforts are presently ongoing.

Major Activities:

1. Safeguard Study

- Environmental Impact Assessment (EIA) of hydropower component was prepared by the consultant ELC Electroconsult and submitted to Department of Electricity Development (DoED) on 14 June 2020 and updated EIA report has been submitted to DoED on 13 April 2025 for approval.

- Regarding Environmental and Social Studies of 81 km 400 kV Transmission Line (TL) from Main Powerhouse to Dhalkebar, Terms of Reference (ToR) of Initial Environmental Examination (IEE) has been approved on 9 June 2024 and IEE Report has been submitted to DoED on 4 February 2025 for approval. The ToR of IEE of 400 kV TL from Dam Toe P/H to Bhadaure Switching Staion has also been submitted to DoED on 28 January 2025.
- The Project is also conducting Environmental and Social Implementation Program during preconstruction phase of the Project. An Environment and Social Unit has been established at the project and the unit has carried out Focus Group Discussion (FGD), Public Consultation and Awareness Program in project affected areas.
- The Consultant has also submitted the Environmental and Social Impact Assessment (ESIA) Report based on ADB guidelines on December 2024 and ADB has reviewed and provided comments/recommendations on the report. ELC is incorporating the comments/recommendations and finalizing the Report.
- To align with the ADB's Safeguard Policy Statement (SPS) of 2009, several safeguard studies are near to the completion. Draft reports have been prepared for: the Site Specific Environmental Management Plan (SSEMP), a Biodiversity Offset Feasibility Study, and Resettlement Plans for both the Hydropower Component and Access Road, a Draft Resettlement Framework (RF), an Entitlement matrix with Policy Gaps analysis, an Indigenous Peoples Plan (IPP), a GESI Action Plan, and a Labor Management Plan (LMP). These draft reports are currently under review for finalization. Furthermore, the third round of consultations for Free, Prior, and Informed Consent (FPIC) with local indigenous people has been successfully completed.
- From 16-18 December 2024, Mr. Nianshan Zhang, Head of the Office of Safeguards (OSFG) at ADB, conducted a consultation mission to Nepal. This mission primarily focused on reviewing the status of safeguard assessments and confirming the project's readiness for approval, involving site visits, community meetings in Lamidada, consultations with local authorities and CDOs in Halesi, and a meeting with the Secretary of the Ministry of Energy, Water Resources and Irrigation (MoEWRI) at Ministry.

Site Inspection during Safeguards Reconnaissance Mission

- A safeguards reconnaissance mission for the Project led by Mr. Bruce Dunn, Director, OSFG was undertaken by ADB from 14-25 February, 2025. This mission was aimed to conduct a comprehensive site assessment of potential environmental and social impacts and offset sites, alongside extensive consultations with various stakeholders, including government officials, local communities, and Indigenous Peoples, to finalize the Environmental Impact Assessment and coordinate safeguard requirements. During this mission, Mr. Dunn also attended a meeting with the Secretary of the MoEWRI at Ministry.

2. Land Acquisition

Public notices have been published for the Land Acquisition in Khotang and Okhaldhunga Districts. Sub-Committee of the Compensation Determination Committee is drafting its report on preliminary land compensation and the process is in final stage.

3. Infrastructure Works

- Camp Site

  On 05 January 2024, agreement was signed with District Coordination Committee Office of Khotang for the extension of the lease agreement upto 2036 for the land of the camp area (about 7 ropani), located at Lamidanda village. In that land construction of new 4 pre-fab building has been completed in this Fiscal Year.

- Access Road

  About 100 km long access roads (named as "Public Access Roads", in short 'PAR') are required to reach the main structures of the project, the dam and the power house, from the national highway network. Out of 100 km access roads, the track roads of about 71 km have already been constructed by federal, provincial and local governments.

- Bridges

  The construction of three bridges (Bhoje Permanent Bridge, Rabuwa Bailey Bridge and Bhadbesi Permanent Bridge) is currently in progress under Design and Build Contracts.

4. Skill Development Training

As part of its Community Support Program, the Project has begun to provide assistance to local communities through skills and livelihood training initiatives. In this effort, a Memorandum of Understanding (MoU) was signed with Rawabesi Rural Municipality on 31 January 2025, to implement a Wooden/ Bamboo Crafting Pilot Program. A 30-day training for 18 participants was successfully conducted from 02 February 2025 to 06 March 2025 and completed.

Project Costs and Financial Arrangement

- The total cost of the Project is currently estimated to be 2,320 MUSD. The Project will be financed through a blended approach, integrating an optimal mix of sovereign and non-sovereign commercial loans with direct equity. A debt-equity ratio of 80:20 will be maintained, with the 20% equity component contributed by the Government of Nepal (GoN), NEA, and other shareholders.
- Upon the request from the Ministry of Finance (MoF), GoN, ADB has been taking lead role to coordinate with other financiers for the Project. Part of loan will be managed by local financing through national financial institutions.

Second Stage Development

The Intake and Headrace Tunnel for the Dam-Toe Powerhouse is being designed to accommodate not only the current 70 MW Dam-Toe Powerhouse but also a future, stand-alone 200 MW Pump Storage Power plant. This larger power plant is envisioned as the second stage of development, expected to be constructed after 5 to 10 years of the initial 670 MW project operation. Crucially, the power generated from this subsequent 200 MW powerhouse will be efficiently evacuated through the same New 400 kV Dam Toe Switching Station, located approximately 1.5 kilometers away from the dam. This integrated design ensures seamless expansion of the project's generating capacity.

9. CHAINPUR SETI JALBIDHYUT COMPANY LIMITED

Chainpur Seti Jalbidhyut Company Limited (CJCL) is a subsidiary company of Nepal Electricity Authority (NEA) that has been established to develop Chainpur Seti Hydroelectric Project (CSHEP). CSHEP is a Peaking Run-of-River (PROR) type project designed on the Seti River with an installed capacity of 210 MW. The project is located at Talkot, Saipal and Mastha rural municipalities of Bajhang district of Sudoorpaschim Province. Total saleable energy from this project is estimated to be 1206.674 GWh consisting of dry season peak energy of 181.743 GWh (5 hrs peaking) and dry off peaking season energy of 190.230 GWh and wet season energy is 834.699 GWh.

Generation license has been issued by Department of Electricity Development (DoED) and Ministry of Forest and Environment has

approved Environmental Impact Assessment (EIA) of the project. After finalizing Deemed Power and Energy with Power Trade Department of NEA, a MOU has been signed with Rastriya Prasaran Grid Company Limited (RPGCL) and Grid Operation Department for the connection agreement.

Feasibility report of the project has been updated by consultant Chilime Engineering and Services Company Limited and reviewed by international consultant SMEC respectively. Along with that, EPC tender document is also prepared. Construction of access road to powerhouse and camp site area is already completed and is under operation. Total land of about 142 ropanies has been aquired for the construction of proposed access roads, camp sites and powerhouse area. Adit tunnels III, V and VI and Camp facilities at powerhouse area are under construction. For the study of 15km long 220 kV double circuit transmission line extending from proposed switchyard to Bajhang substation, required permits have been obtained from DoED and survey has been completely done. Additional study is being done for access roads to proposed surge tank area, Adit IV and headwork site of the project.

Adit-3 tunnel

Investment Board has approved for the investment in this project. To manage the required funds for the construction of project, under the leadership of Hydroelectricity Investment and Development Company Limited (HIDCL), discussions are underway with Employees Provident Fund (EPF), Citizens Investment Trust (CIT), Social Security Fund (SSF), Laxmi Sunrise Bank and other commercial Banks. Chainpur Seti Jalbidhyut Company Limited is continuously thriving for successful completion of the project.

10. TRISHULI JAL VIDHYUT COMPANY LIMITED

Trishuli Jal Vidhyut Company Limited (TJVCL), is a joint venture of Nepal Electricity Authority and Nepal Doorsanchar Company Limited (NDCL), established in 2011 with the main objective of developing the Upper Trishuli 3B Hydroelectric Project (37 MW) in Nuwakot and Rasuwa districts. Both NEA and NDCL have equal (30% each) equity shareholding in the Company. Rest of the equity share has been allocated to the general public, natives of Nuwakot and Rasuwa districts, local governments of Nuwakot and Rasuwa districts, employees of NEA and NDCL among others.

Upper Trishuli 3B Hydroelectric Project (UT3BHEP) is a Run of the River type cascade development Project. The Project will utilize the water coming out of the tailrace tunnel of the upstream Upper Trishuli 3A Hydroelectric Project. A Headpond is being constructed at the outlet of the upstream project to divert the water through Approach Pressure Conduit towards the Headrace Tunnel of the UT3BHEP.

Salient features of the Project:

Project Location	Nuwakot and Rasuwa districts
Head-pond and Approach Pressure Conduit	29m (L) x 5.2 to 11.0 m (B) x 7.4 to 14.8 m (H) 243.47m (L) , 5.1m x 5.1m Box Culvert + 40m long, 5.1m dia. Steel Pipe
Headrace Tunnel (HRT)	Total length: 3883.02 m; Excavation Diameter: 6.3 m
Surge Tank	Diameter: 15 m; Height: 43 m
Penstock	Diameter: 4.2 m (circular); Total Length: 175.95 m
Powerhouse (Type/ Length x width x height)	Surface / 55.44m×19.30m×32.37m

Tailrace (Length and Type)	115.06 m, Box Culvert
Turbine	Francis (vertical axis), 2*19.3 MW
Generator	2*23 MVA
Maximum Gross Head	90 m
Installed capacity	37 MW
Average annual energy	292.58 GWh
Length of Transmission line (132 kV)	3 km

Current Status

An Engineering Procurement and Construction (EPC) contract signed with an international contractor in February, 2018 to construct and commission the UT3BHEP had to be terminated by TJVCL in December, 2023 due to serious delay and non-performance on part of the contractor. After the termination of the EPC Contract, the Company divided the remaining work in two lots; Lot 1 Civil Works and Lot 2 Electromechanical and Hydro-mechanical Works and bids for both Lots had been invited in Falgun, 2080. Contract for Lot 1 Civil Works was signed in Shrawan, 2081 with Fewa Construction Pvt. Ltd, Pokhara. The Lot 1 Contractor is carrying out construction of the remaining civil structures of the Project as per the approved construction program. The Bids invited for Lot 2 had to be cancelled two times (in Bhadra, 2081 and Magh, 2081) due to unavoidable reasons and bids were invited for the third time in Magh, 2081. The contract for Lot 2 Works is now expected to be signed within Shrawan, 2082. Due to the delay in selecting contractor for Lot 2 Works, the construction and commissioning schedule of UT3BHEP has been seriously affected. All the remaining construction works of the Project is planned to be completed by the end of Chaitra, 2083 with the aim of generating electricity by fiscal year 2083/84. The power produced by the Project will be evacuated to Trishuli 3B Hub Sub-station through 3 km long 132 kV transmission line. The transmission line is being built by NEA under a separate agreement with TJVCL. As of Asadh, 2082, about 77% of the civil works and about 85% of the transmission line works have been completed. All required preparatory works have been fully completed.

11. RAGHUGANGA HYDROPOWER LIMITED

Raghuganga Hydropower Limited (RGHPL) was established as a subsidiary company of NEA on 7th March, 2017 (24th Falgun, 2073) to implement Rahughat Hydroelectric Project under the financing of EXIM Bank of India under LOC to GON and joint-investment of GON and NEA. It is a PROR designed with 6-hour peaking time. The Project envisages to generate 40 MW (2X20MW) of power by diverting 16.67 cumecs of water through a Head Race Tunnel and Pressure shaft to a surface Power House located at right bank of Kaligandaki River at Galeshwor, Myagdi which is about 300m upstream of the confluence of Raghuganga River with Kaligandaki River.

The major components of the Project lie at the left bank of Raghuganga River. It is one of the major tributaries of Kaligandaki River that flows from west to east to meet Kaligandaki River at Galeshwor. Raghuganga River will be diverted through a Barrage to 6.270 km headrace tunnel (HRT) to generate 40 MW of power. The proposed headrace tunnel runs along left bank of Raghuganga River. The surface powerhouse is located on the right bank of the Kaligandaki River. The project envisages construction of 25 m high Barrage with 2 no Spillways and one Under Sluice, an 80m long Desander with 2 bays, a 6.270 km long Head Race Tunnel of 3.30 m finished diameter, a 53.2 m high, 10m diameter Surge Tank, 1026 m long 2.15m diameter Pressure Shaft, a manifold bifurcating into two Penstock, a 55.40m x 24.9m Power House and a cut & cover Tailrace arrangement. Power Purchase Agreement for the Project was signed with NEA on 1st April 2019 (18th Chaitra, 2075). The project is expected to be completed by December, 2025.

Project Status and Progress:

1) Lot 1 - Civil and Hydro-Mechanical Works:

Headwork

The EPC Contract Agreement for Lot 1 – Civil and Hydro-Mechanical Works was signed between RGHPL and M/s Jaiprakash Associates Limited, Noida, India, on 21st November, 2017. The Notice to Proceed was issued on 24th May, 2018 following concurrence from EXIM Bank of India. As of Fiscal Year 2081/82, the physical progress of Lot 1 stands at approximately 88%. The detailed description of physical progress of Lot 1 are as follows:

- Access Road (Powerhouse to Head works, 11 km): Excavation is ongoing from multiple fronts; retaining structures, cross-drainage, and side drain works are in progress.
- Head Race Tunnel: Excavation and rock support completed; concrete lining completed for 5,900 m out of 6,270 m.
- Pressure Shaft: Excavation and rock support completed; steel lining in progress, with 880 m completed out of 1,049.86 m.
- Surge Shaft: 10 m diameter, 61 m deep surge shaft excavation, rock support, and concrete lining completed.
- Powerhouse: Structural works fully completed.
- Spillway, Under-sluice & Stilling Basin: Civil works completed; hydro-mechanical works ongoing.
- Gates: Bulkhead and radial gate erection completed in the Under-sluice and Spillway-1; in progress at Spillway-2.
- Power Intake: Works ongoing, with approximately 70% completed.
- Tail Race Duct: Completed.

2) Lot 2 - Electromechanical Works:

The Plant Design-Build Contract Agreement for Lot 2: Electro-Mechanical Works was signed between RGHPL and M/s Bharat Heavy Electricals Limited (BHEL), India on 15th October 2019. Following concurrence from EXIM Bank on 30th November, 2019, the Notice to Proceed was issued on 4th December, 2019 to commence the works. As of Fiscal Year 2081/82, the physical progress of Lot 2 has reached approximately 60%. The detailed description of physical progress of Lot 2 are as follows:

- Earthing material supply and installation in Powerhouse completed.
- 70 Ton Double Girder EOT Crane erected; ready for final testing and commissioning.
- Generator alignment and MIV erection for Unit-1 completed. Stator alignment for Unit-2 completed. Rotor building and cooling/ drainage pipeline works in progress.
- Prototype model testing of the turbine successfully completed.
- FAT/Inspection of different EM components in progress. Turbine (Unit-1) dispatched; turbine shaft delivered to site. Inspection of Transformer and Turbine (Unit-2) completed and under progress for dispatch. 15 Ton Single Girder EOT Crane for Valve Chamber delivered to site.
- Lower pit liners and central framework for Unit-1 completed.

3) Major Consulting Contract:

- The contract for Consulting Services was signed with M/S WAPCOS Limited, India on 16th Feb, 2012. The Consulting service is ongoing in parallel with Lot 1 and Lot 2 Works. The Consultant is responsible for reviewing and approving the designs and drawings submitted by the contractors, as well as for construction supervision and overall project management of both major contracts.

12. UTTAR GANGA POWER COMPANY LIMITED

Uttar Ganga Power Company Limited, a NEA subsidiary company, established on March 30, 2017, is overseeing the Uttar Ganga Storage Hydroelectric Project. The project was initially licensed for 300 MW in FY 2015/16. However, the project's capacity was increased to 828 MW in FY 2017/18. The project site is situated about 400 km west of Kathmandu in Baglung District, Gandaki Province, accessible by a 48 km road from Burtibang Bazar. The project features a 200 m high rock-fill dam, an 8.51 km headrace tunnel, and large underground powerhouses with a combined capacity of 821 MW. A 65 km, 400 kV DC transmission line is planned to connect to the UttarGanga Hub in Rukum.

Key updates for FY 2024/25 include:

1. On February 1, 2024, a contract was signed with NEA Engineering Company for a feasibility review and in-basin study alternative.
2. Staff gauge height and discharge measurements at Uttar Ganga River and Nisi Khola are ongoing.

13. TANAHU HYDROPOWER LIMITED

Tanahu Hydropower Limited (THL) was established as a subsidiary company of Nepal Electricity Authority (NEA) on 25 March 2012 to develop Tanahu Hydropower Project (previously known as Upper Seti Hydropower Project). The project is a storage type hydropower project with a capacity of 140 MW and an estimated average annual energy generation, after outage, of 502.58 GWh.

The project is located on the Seti River within the geographical boundaries of Rhising and Vyas municipalities, near Damauli, the district headquarters of Tanahun District. The reservoir will extend about 25 km upstream inundating the low-lying lands (FSL 415 m) along the Seti River. The project area covers 2 municipalities (Vyas and Bhimad) and 2 rural municipalities (Rhising and Maygde).

The initial estimated cost of the project was US$ 505 million. However, based on the current status, the revised estimated cost stands at US$ 597.38 million, resulting in a financing gap of US$ 92.38 million. The company has already communicated this shortfall to the Ministry of Finance through the Ministry of Energy, Water Resources, and Irrigation, seeking additional financing. The construction work of the project is going on in full swing through three different packages.

Package 1: Headworks

Under the Package 1 Contract, the contractor, Song Da Kalika JV (Vietnam-Nepal), completed excavation of the dam abutments and grouting tunnels, enabling the concrete placement in dam.

A flood in the Seti River on 6 July 2024 caused damage to the site establishment area, including partial damage to the aggregate crusher and cooling plants. Both the plants have been relocated to safer locations near the hillside. In addition, riverbank protection works to safeguard the site establishment area have been completed.

Concrete placement in the main dam is a critical activity of the project. It commenced on 20 March 2025 across four dam blocks. By the end of June, approximately 46,000 cubic meters of concrete had been placed, with an average height of 10 meters achieved from the foundation level. Consolidation grouting in the dam foundation has been completed and is ongoing in the abutments. Curtain grouting is also progressing in the bottom grouting galleries and the upstream section of the dam foundation.

Main Dam

In parallel, activities such as drilling, grouting and concrete lining of the grouting galleries are ongoing across multiple dam fronts.

Package 2: Powerhouse, Waterways & Related Equipment

The Contractor, Sinohydro Corporation Limited (China), has completed the concreting works in the powerhouse. Benching of the Headrace Tunnel (HRT), including the rectification of deformed sections, has also been completed. Concrete lining in the HRT is currently in progress, with 660 meters completed till mid of July. In addition, excavation and installation of the temporary support system for the intake shaft have been completed, and concrete lining has commenced from the gate storage area.

The installation of the draft tube, draft tube flap gate, spiral case, MIV, guide vanes, and stay vanes for both units have been installed. Both runners have been lowered into their final positions, with component installation and final alignment currently in progress.

Stator assemblies for both units have been completed, magnetization-tested and lowered into the generator pits. The rotor for Unit-2 was successfully lowered into the generator pit on 10 April 2025 following successful testing, while the same task remains pending for Unit-1.

Additionally, installation works for the power transformers, GIS, IPB, cable cabinets, steel penstocks, as well as the cooling water system, drainage, and firefighting pipelines are ongoing.

Package 3: 220 kV Transmission Line

The Contractor for Package 3 Contract, KEC International, India has completed the construction of foundation of 78 towers out of 94 towers and currently working on two foundation locations. Preparations are underway to commence conductor stringing works in the Tanahun section. Land acquisition for tower locations and right of way has been completed. Forest clearance approval is yet to be received.

Consultancy Service Contract

The construction work of project is being supervised by Lahmeyer International GmbH (formerly called Tractebel Engineering GmbH, Germany) as the Project Supervision Consultant, while the environment and social monitoring work is being monitored by ELC Electro-consult, Italy.

THL signed contracts with individual members of the Panel of Experts (PoE) for dam safety, environmental, and social safeguards on 17 December 2018. The PoE conducted a site visit in January–February 2025, which was followed by a series of discussions focusing on Environmental, Health, and Safety (EHS) management capacity, the level of EHS compliance, dam safety, construction-related matters, and environmental and social issues.

Lower Seti (Tanahu) Hydropower Project

THL envisages to develop Lower Seti Hydropower project with an installed capacity of 126 MW with the utilization of regulated discharge of Seti River from the tailrace of Upper Seti (Tanahu) Hydropower Project in addition to the flows of Madi River. The headwork of the project lies about 24 km downstream from Damauli and the powerhouse site is located at about 1.5km downstream from the confluence of Seti River and Trishuli River.

The Consultant JV of WAPCOS India Limited and Nippon Koei, Japan was appointed for the detailed design, EIA study and land parceling, demarcation of full supply level of Lower Seti Project. Following the review report of the Panel of Experts (PoE), the Consultant submitted the final detailed design report in June 2024. EIA study is under approval process. The Demarcation of full supply level on-site has been completed and land parceling report has also been submitted. The Contractor R.K. Hydro has been mobilized on-site for construction of access, exploratory adit tunnel. Contract energy of Lower Seti has been finalized with power trade department of NEA and grid connection process has been commenced. The cabinet of ministers has given consent to initiate the land acquisition process and appointed preliminary

officer to initiate preliminary action. Starting from this fiscal year, the project has commenced its preparatory works like land acquisition, access roads to power house site etc. The Lower Seti project Site office was opened in Saranghat, Tanahu, in Baishakh 2081.

14. RASUWAGADHI HYDROPOWER COMPANY LIMITED (RGHPCL)

Rasuwagadhi Hydropower Company Limited (RGHPCL), established on August 2, 2011, is the developer of the 111 MW Rasuwagadhi Hydroelectric Project (RGHEP), located in the Rasuwa district of Bagmati Province. The shareholding structure comprises 32.79% held by Chilime Hydropower Company Limited, 18% by Nepal Electricity Authority, 0.21% by the local government and the remaining 49% have been issued to the public, including those from the project-affected areas. Debt financing for the project has been provided by Employees Provident Fund (EPF).

Salient Features of the Project:

Type of Project	Run-of-River (RoR)
Design Discharge (Q_{40})	80.00 m^3/s
Gross Head	167.9 m
Turbine, Type & No.	Francis, Vertical Axis & 3 Nos.
Turbine Unit Capacity	38.50 MW each
Generator, Capacity & No.	3 Phase Synchronous AC, 3 × 43.75 MVA
3Installed Capacity	111.0 MW
Annual Energy Generation	613.87 GWh
T/L Length, Voltage	10 km, 132 kV Double Circuit up to Chilime Hub
Project Cost (excluding IDC)	NRs. 18 Arab 61 Crore

The project received back-charging from the Chilime Hub on 10 November 2024. Subsequently, the 72-hour trial run of Unit 1 was successfully completed on 1 December 2024, followed by the successful trial runs of the remaining units on 12 December and 15 December 2024, respectively. The commercial generation commenced on 31 December 2024 (16 Poush 2081 B.S).

Major Natural Disaster

The Plant encountered severe disaster in the fiscal year 2081/82 due to a recent GLOF induced flash flood event on 8 July 2025 (24th Asar 2082). The flood caused extensive damage to key infrastructure, including major civil structures and hydro-mechanical components of the head-works. The powerhouse, particularly the MIV floor and turbine floor, was inundated, leading to damage of the electromechanical components and associated auxiliary systems. Additionally, both steel bridges at the head-works and powerhouse are at risk. The tailrace tunnel has been filled with flood debris and logs. The event has disrupted the power generation and creating significant safety hazards. Furthermore, the camp facilities and access roads to the tailrace and surge tank were completely swept away by the flood. Despite these challenges, the company has already initiated restoration works and is making every effort to resume power generation as soon as possible.

15. UPPER ARUN HYDRO-ELECTRIC LIMITED

Upper Arun Hydro-Electric Limited (UAHEL) is a Special Purpose Vehicle (SPV) of NEA established in 2017 to promote and develop hydropower projects. Aligned with the Government of Nepal's "People's Hydropower" vision, the Company is promoting two major hydropower projects in Sankhuwasabha District:

1. Upper Arun Hydroelectric Project – 1,063.36 MW capacity
2. Ikhuwa Khola Hydroelectric Project – 40 MW capacity

These projects aim to harness Nepal's vast hydropower potential, contributing to national energy security, economic growth, and sustainable development.

Under the Upper Arun Hydropower Project—a game changer project—the Company has completed all preparatory activities, including land acquisition and compensation distribution, environmental compliance and necessary approvals, geological and geotechnical

investigations. Additionally, key infrastructure works—such as the 21 km access road (including a 2.03 km tunnel) and Employer's camp construction— and activities related to the Indigenous Peoples Plan (IPP) under Free, Prior, and Informed Consent (FPIC) are ongoing. The project has procured an international consultant for design, bidding document preparation, construction supervision, and post-construction and works relating to tender design and reference design are underway. Key agreements, including the grid connection, are already in place, while the power purchase agreement is in its finalization phase. With all pre-construction preparatory activities nearing completion, the project is now ready to commence its construction phase.

The Project has garnered strong financial backing, reflecting confidence from both domestic and international stakeholders. International financial institutions led by the World Bank have pledged a combined investment of US$1.89 billion. On the domestic front, Memorandum of Understanding (MoU) was signed on 2079/05/30 (mid-September 2022) for an investment of NPR 53.14 billion through a consortium led by the Hydropower Investment and Development Company Limited (HIDCL).

In parallel development, the tender design documentation for the associated Ikhuwa Khola Hydropower Project has been prepared by the Consultant and geological and geotechnical conditions of the Project site are currently being investigated, demonstrating comprehensive advancement across all project aspects.

16. NEA ENGINEERING COMPANY LIMITED

NEA Engineering Company Ltd (NEC) stands as a testament to Nepal's commitment to harnessing its vast hydropower potential and developing robust infrastructure. Established on March 03, 2017, NEC was conceived as a government-sector engineering consultancy firm under the National Energy Crisis Reduction and Electricity Development Decade Action Plan-2072.

Major Achievement in FY 2081/82 are as follows:

1. Total turnover 50 Crores including VAT, which is highest since its commercial operation on 13th July, 2017
2. MoU with various reputed international companies like Tetra Tech Canada, SATT Engineering Canada, SMEC Australia, Fitchner Germany, NEWJEC Japan and K&A USA
3. To date NEC has completed detailed feasibility and detailed engineering studies for several large hydropower projects, ranging from run-of-river to peaking pond age and large storage schemes. Key projects include:
    - Betan Karnali HEP (439 MW)
    - Phukot Karnali (480 MW)
    - Kimathanka Arun (450 MW)
    - Jagdulla (106 MW)
    - Sunkoshi Marin Diversion Project (31.07 MW)
    - Rolwaling Khola (20.66 MW)
    - Mugu Karnali (1902 MW)-Feasibility Report Submitted on Poush, 2081
    - Jagdulla-A (122.20 MW)-Detail Report submitted on Ashad, 2082
4. NEC has played a pivotal role in the development of Nepal's high-voltage transmission infrastructure. Key accomplishments include:
    - **Hetauda-Dhalkebar-Inaruwa 400 kV Transmission Line:** Successfully completed and commissioned 153 km on 25th June, 2024 of the Inaruwa-Dhalkebar 400 kV TL as the Project Supervision Consultant.
    - **25 MW Grid-Tied Solar Farm:** Completed and commissioned the solar farm at Bidur, Trishuli.
    - **400 kV Phukot-Betan-Dododhara Transmission Line:** Completed design review of DA, DB, DC and DD tower and proto tower testing of DB, DC and DD.

- **220 kV Tumlingtar-Sitalpati TL & Substation:** Completed design reviews, with construction currently underway. The TL portion is already completed, and substation is in the advanced stage of completion.
- **Matatirtha-Dukuchhap-Sirutar-Nalagumba-Lapshiphedi-Kapan Gumba-Tinpiple 220 kV Transmission Line Project** completed.

5. Contribution to multipurpose Irrigation, Hydropower and Transmission Line as Construction Supervision:
   - Bheri Babai Diversion Multipurpose Project (BBDMP): Providing irrigation to 51,000 hectares and generating 46 MW of power.
   - Rolwaling Khola HEP (22 MW)
   - Upper Modi and Modi-A (42 MW)
   - Upper Modi (18.2 MW)
   - 400 kV Phukot-Betan-Dododhara Transmission
6. Environment Study:
   - Initial Environmental Examination (IEE) Study of Main Transmission Line of Phukot Karnali PROR Hydro Electric Project - approved in FY 2081/82.
   - Revised IEE Study of Mewa - approved in FY 2081/82
   - Consulting Services for Tree Enumeration, Revised Initial Environmental Examination (IEE), Tree Cutting Permission and Forest Land Use Approval for the New Butwal- Lamahi 400 kV Transmission Line Project - Tree Enumeration (90%) completed in FY 2081/82

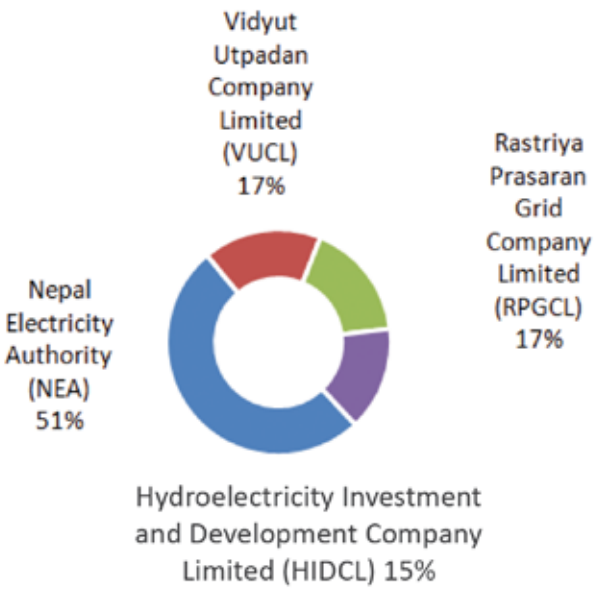
Future Outlook

By capitalizing on its deep technical expertise and commitment to nurturing local talent, NEC is not only positioned to fulfill Nepal's growing demand for high-quality consulting services in energy and infrastructure but also to make meaningful contributions to regional market and recently NEC in JV with Fitchner participated in the bidding for "Preparation of Detailed Project Report (DPR), including Environmental and Social impact Assessment (ESIA) for Khomachhu Hydropower Project" of 333 MW located in Lhuntse District, Eastern Bhutan.

17. NEPAL POWER TRADING COMPANY LIMITED

Nepal Power Trading Company Limited (NPTC) was incorporated on 7th March, 2017 as a subsidiary company of NEA, with the broad objective of facilitating power trading both within and outside the country.

Shareholding Structure of NPTC



The company has obtained Trading License from Ministry of Energy, Water Resources and Irrigation (MoEWRI) on 2nd Magh, 2078. However so far the company has not been operationalized yet. The company's major activities have so far been primarily focused on fulfilling legal and regulatory compliances such as Board Meetings, Annual General Meetings (AGMs) and Audit. The Audit has been completed for all FYs and so far 2 AGMs have been conducted for the company.

18. POWER TRANSMISSION COMPANY NEPAL LIMITED

Power Transmission Company Nepal Limited (PTCN), a Joint venture company of Nepal Electricity Authority was incorporated on Bhadra 30, 2064 (i.e. 16th September, 2007) with the main objective of developing high voltage transmission interconnection system between Nepal and India for the mutual interest and benefit of both the countries.

The ownership structure and shareholding of PTCN are as follows:

S. No.	Shareholders	No.s of Share held	% of ownership
1.	Nepal Electricity Authority (NEA)	22,50,000	50%
2.	Power Grid Corporation of India Limited (Power Grid)	11,70,000	26%
3.	Hydroelectricity Investment and Development Company (HIDCL)	6,30,000	14%
4.	IL&FS Energy Development Company Limited, India (IEDCL)	4,50,000	10%
	Total	45,00,000	100%

Two Joint Venture companies - one in India and other in Nepal were incorporated for implementation of 400 kV double circuit line interconnection between Muzaffarpur in India and Dhalkebar in Nepal.

(i) 400 kV D/C Dhalkebar - Bhittamod Transmission Line

Nepal Portion of the Dhalkebar-Muzaffarpur 400 kV Double circuit Transmission Line extends 42.1 km from Nepal Border at Bhittamod to NEA Substation at Dhalkebar in Nepal. The Nepal Portion of the Line was constructed by PTCN. The line was initially charged at 132 kV voltage level under contingency arrangement in 19th Feb, 2016 which was charged at 220 kV on 16th Aug, 2018 and finally charged to 400 kV effective from 11th Nov, 2020, 20:20 PM. The entire line from Muzaffarpur to Dhalkebar is running satisfactorily at 100% availability till now.

(i) 400 kV D/C Muzaffarpur - Bhittamod Transmission Line

India portion of the Dhalkebar-Muzaffarpur 400 kV Double circuit Transmission Line extends about 86 km from Muzaffarpur Substation of POWERGRID in Bihar to Nepal-India border at Sursand/Bhittamod. This portion of line has been implemented by Cross Border Power Transmission Company Limited (CPTC) - a Joint Venture of IL&FS Energy Development Company Limited (IEDCL), POWERGRID, SJVN Limited and NEA.

Contracts for Engineering, Procurement, and Construction (EPC) for both Nepal & India Portions were awarded to M/s TATA Projects Limited and M/s KEC International Limited, respectively following an International Competitive Bidding process undertaken by POWERGRID as Consultant.

CENTRAL ACTIVITIES

Internal Audit Department

The **Internal Audit Department** of the Nepal Electricity Authority (NEA) functions as an independent and integral unit reporting to the NEA Board through audit committee. It operates separately both functionally and organizationally from other departments within NEA, ensuring its autonomy and objectivity. The primary mandate of the department is to provide independent assurance that NEA's **functional performance, risk management, governance, Compliances and internal control processes** are operating effectively, efficiently and economically.

The scope, authority, and responsibilities of the Internal Audit Department are defined through the **Financial Administrative Byelaws, 2068** and the **Internal Audit Guidelines** of NEA. The department follows a structured and standards-based audit process in accordance with **Nepal Auditing Standards** and is guided by the **Audit Committee** of NEA. It is led by a Director who oversees the planning, execution, monitoring, and evaluation of various audit activities across the organization.

Types of Audits Performed

The Internal Audit Department undertakes several types of audits to ensure comprehensive oversight:

- **Financial Audit:**

  Focuses on verifying the effectiveness and efficiency of internal controls over financial reporting. It includes reviewing internal processes to ensure compliance with applicable laws, accounting standards, regulations, and internal policies, including propriety audits.

- **Technical Audit**

  Encompasses the evaluation of technical standards, norms, and parameters. It also assesses aspects like energy balance, preventive and breakdown maintenance, condition monitoring, and electricity loss management.

- **Management Audit**

  Involves a thorough review of managerial planning, policies, procedures, and implementation effectiveness. Key focus areas include procurement management, organizational structure, job analysis, accountability, and monitoring and evaluation mechanisms.

- **Risk Management Audit**

  Evaluates internal controls from the perspective of risk management. The audit checks whether a comprehensive **Risk Management Framework** is in place that identifies, assesses, controls, and monitors significant risks in line with best practices.

Audit Committee

A four-member Audit Committee has been constituted by NEA, comprising a NEA Board member as Chair person and two domain experts from the finance and energy sectors and Director of Internal Audit department as

a member secretary. The committee's major responsibilities include:

- Facilitating effective communication between the Board of Directors and the internal and external auditors.
- Safeguarding the independence of both internal and external auditors.
- Providing a structured reporting line for internal audit activities.
- Monitoring the financial reporting system and evaluating the effectiveness of NEA's internal controls, audit functions, and risk management practices.

Digital Transformation and Reporting:

To strengthen audit efficiency and coverage, the Internal Audit Department has introduced **Online Audit Software** which supports digital execution of audits. The department carries out **half-yearly, Quadrimestrial and annual audits**, and reporting findings to both the **Audit Committee** and the **Managing Director** of NEA.

The Audit Committee also holds regular meetings and strategic interactions to provide direction and feedback on audit-related matters. This ensures continual enhancement of NEA's internal control environment.

Audit Coverage – FY 2024/25

Details of finance/management/technical audit event coverage for the fiscal year 2024/25 are as follows:

Office	Half yearly	Quadrimestrial	Annually*	Risk base	Total
Corporate	11	-	15	2	28
GTDE**	30	211	225	15	481
Project	17	12	234	3	266
Total	**58**	**223**	**474**	**20**	**775**

*Annually/Q3 is subject to Provisional

**GTDE, G=Generation, T=TransmissSion, D=Distribution, E=Engineering

NEA Board Matters

The NEA Board serves as the policy-making body of the Nepal Electricity Authority (NEA). The Honorable Minister of Energy, Water Resources, and Irrigation, Mr. Dipak Khadka, currently chairs the Board.

Mr. Suresh Acharya, Secretary (Energy) at the Ministry of Energy, Water Resources, and Irrigation, has been serving as an ex-officio member of the NEA Board since 2081.07.04, succeeding Mr. Gopal Prasad Sigdel.

Similarly, Mr. Dinesh Kumar Ghimire, Secretary (Revenue) at the Ministry of Finance, joined the Board as an ex-officio member on 2081.04.30, following Dr. Ram Prasad Ghimire.

Mr. Hitendra Dev Shakya assumed the role of ex-officio Member Secretary on 2081.12.12, succeeding Mr. Kulman Ghising.

Mr. Ratan Bahadur Ayer continues to serve as a Board member representing the power sector. During the last fiscal year, the Government of Nepal appointed new members to fill the vacant positions on the Board of Directors. As per these new appointments, Dr. Bal Bahadur Parajuli was nominated from the power sector, Mr. Shyam Kishor Yadav from the consumer group, and Mr. Rohit Paudel from the commerce, industry, and financial sector.

In total, 29 Board meetings were convened during the fiscal year 2024/25.

Gender Equality and Social Inclusion (GESI)

Nepal Electricity Authority (NEA) stands as the first utility organization in Nepal to adopt a formal Gender Equality and Social Inclusion

(GESI) Policy, following the endorsement of the GESI Strategy and Operational Guideline 2020 during its 827th Board Meeting held on 2076/12/06. Since the endorsement, NEA's management has demonstrated a strong commitment to mainstreaming GESI across its plans, policies, and annual activities. As part of this commitment, NEA's 1002nd Board of Directors' Meeting recently endorsed the NEA Child Care Center Formation and Operation Guideline, 2082, while the Code of Conduct on Sexual Exploitation and Harassment (SEAH) is in its final stage of endorsement. These initiatives aim to establish a GESI-friendly workplace and ensure supportive facilities, aligned with the long-term vision outlined in the GESI Strategy.

At the directorate level, the Project Management Directorate, through its Social Safeguard and Environment Management Department (SSEMD), has actively implemented a variety of GESI-focused initiatives. These include community awareness programs, skill development training, and professional development activities for NEA staff, such as officer-level training on smart metering and customer service.

NEA is also an institutional partner of the South Asian Regional Network – Women in Power Sector (WePOWER) since April 2021. As a committed member, NEA regularly reports its GESI-related initiatives to WePOWER and has established itself as a strong representative within the regional network. Notably, NEA's Human Resource Director participated in the WePOWER National Chapter Business Meeting held on January 30–31, 2025, in Bangkok, Thailand.

In further support of women's empowerment in the energy sector, NEA facilitated an exposure visit to the Devighat Hydropower Plant and Solar Plant, an event organized by the WePOWER National Chapter, Nepal.

ADMINISTRATION DIRECTORATE

Administration Directorate is headed by Deputy Managing Director. This directorate plans, directs and monitors the functions of four different departments namely Human Resource Department, Recruitment Department, General Service Department and Legal Department. Each of these departments is headed by a director. This directorate also coordinates the activities of different directorate and works as a focal point for government and other oversight agencies in relation to administrative activities of NEA.

HUMAN RESOURCE DEPARTMENT

Human Resource Department is responsible for planning, organizing, directing and controlling of NEA's policies related to human resource management. The main functions of the department are job analysis, placement, transfer, training and development, staff welfare, disciplinary actions etc. Personnel Administration Division, Employee Welfare Division, Good Governance Division and Human Resource Planning and Development Section are supporting units of Human Resources Department.

In FY 2024/25, Human Resource Department carried out number of activities related to human resource management. Notable among them are:

1. Merit base placement system has been started for the recommended candidates, who are selected to competition basis.
2. All employees' profile and service log has been digitized in HRIS System.
3. Transfer management module has induced in HRIS and will be executed by FY 2025/026.
4. "Centralized e-Attendance" has been upgraded and will be integrated with Payroll System in next year.

1. Personnel Administration Division:

a) Central Personnel Administration Section:

Employee Status FY 2024/2025

The statistics of employed human resource till the end of fiscal year 2024/025 is given in the table.

Level	Service	Approved Position	Existing situation		
			Permanent	Periodical/ Daily wages	Total
Managing Director		1	1	0	1
DMD (Level-12)	Technical/ Non-Technical	**9**	8	0	8
Officer Level (Level 6-11)	Technical	1758	1261	0	1261
	Non-tech	883	680	1	681
	Total	**2641**	**1941**	**1**	**1942**
Assistant Level (Level 1-5)	Technical	6019	4213	111	4324
	Non-tech	2763	2285	93	2378
	Total	**8782**	**6498**	**204**	**6702**
Grand Total		**11433**	**8448**	**205**	**8653**

Similarly, Central Personnel Administration Section has accomplished the given human resource activities in the fiscal year 2024/025:

S.No.	Description	Nos.	Remarks
1.	Regular Transfer, deputation in NEA projects & NEA Subsidiary Companies	490	By provision of NEA Service Bylaws clause 43, 46, 47
2.	Promotion& Placement	388	By provision of NEA Service Bylaws Chapter 7
3.	Special promotion	135	By provision of NEA Service Bylaws clause 67, 100
4.	New Recruitment and Placement	188	By provision of NEA Service Bylaws Clause 30
5.	Total no of Retired employees	323	Compulsory, voluntary, resignation, dismissal and deceased

b) Central Personnel Record Section:

This section maintains the record including documents of each permanent employees from appointment to retirement. This section also calculates the retirement benefit such as pension, gratuity as well as medical facility, accumulated leave facility etc. During the period, 323 employees retired and availed this facility.

2. Good Governance Management Division

This division is responsible for maintain good governance in the organization. The division receives and addresses complaints from government agencies like Commission for the Investigation of Abuse of Authority (CIAA), National Vigilance Center and Ministry of Energy, Water Resources and Irrigation as well as NEA.

FY 2024/2025

S.No.	Agencies	Total Complaint	Resolved	In process
1.	Complaint received from CIAA	90	54	36
2.	National Vigilance Center	5	4	1
3.	Ministry of Energy, Water Resources and Irrigation	20	12	8
4.	Complaint within NEA	24	9	15

3. Employee Welfare Division

Employee Welfare Division provided following facilities to the employees in accordance to NEA rules and regulations in the F.Y. 2024/2025:

S. No.	Descriptions	Types	Nos.	Amount (Rs.)
1	Grant	Natural Disaster	5	2,00,000.00
		Kaj Kiriya	246	50,30,000.00
		Critical Illness	4	2,00,000.00
		Educational	1	30,000.00
		Additional Grant for Critical Illness	15	-
2	Medical Insurance	Accidental	54	2,36,61,193.00
		Medical Treatment	1178	4,87,71,990.00
3	Group Endowment life Insurance	Payment received from Beema Corporation	303	49,86,51,434.00
		Additional payment by NEA (Difference)	235	30,20,11,136.37
		Insurance renewal	7186	73,75,39,302.64
4	Soft Loan	Medical Treatment loan (Rs. 50,000)	398	1,99,00,000.00
		Electric Vehicle Purchase Loan (Rs. 5,00,000)	50	2,50,00,000.00
		Natural Disaster Loan (Rs. 2,00,000)	2	4,00,000.00
		House Maintenance Loan (Rs. 2,00,000)	831	16,62,00,000.00
		Social Loan (Rs. 50,000)	331	2,01,00,000.00

4. Human Resource Planning and Development Section

Human Resource Planning and Development Section have completed the following works in the F.Y. 2024/2025:

S.N.	Action	Descriptions
1	Permanent Positions of NEA updated based on the Organization and Management report.	Total 11433 positions have been approved
2	Nomination for Post Graduates Study in NEA Scholarship	Electrical – 6, Civil-1, Mechanical – 1, MBS-1, LLM - 1
3	Leave Granted for Study Purpose in Self Finance	4 employees in different programs
4	Nomination for Training, Conference, Work-shop, Study Visit etc. in aboard	88 Employees in different programs
5	Nomination in National Level Workshops, Trainings, Conference etc.	338 Employees in different programs

S.N.	Action	Descriptions
6	Reviewed of Temporary Positions for Projects	1638 Temp Position for 139 Projects including Transmission Line and substations etc.
7	Nomination for Intern students from various academic institutions	Interned 1032 students for 3 to 12 months of different Academic Institutions

GENERAL SERVICE DEPARTMENT

General Service Department (GSD) is responsible for vehicle management, logistic support and security management activities and provides necessary support to concerned offices. It also manages the land of NEA against encroachment and misuse. The department is also responsible for events management, public relation and public grievance handling and regular publication of "Vidyut" magazine and Mandatory Publication (swatah prakashan).

In FY 2024/25, GSD carried out number of activities to fulfill its responsibilities. Notable among them are:

1. GPS system for vehicle management is in the process of execution.
2. For reliable water supply to corporate office of NEA, Deep Boring plant is installed and is on the process to be executed.
3. Construction of sophisticated toilet/washroom in corporate office premises is going on.

The following grievances/complaints were lodged and resolved:

S.No.	Sources of Grievances	Total Complaint	No. of Settled	Remarks
1.	Hotline Number (1150) and CRM (Consumer relationship management system)	57184	56953	231 grievances are in progress to be resolved.
2.	Hello Sarkar	581	484	97 grievances sent to concerned office are in progress
3	Social media (Facebook, Twitter)	315	314	1 complaint was sent to concerned office is in process
4	Email/webmail	62	60	2 complaints were sent to concerned office are in progress
5	Complain Box	5	2	3 complaints were sent to concerned office are in progress
6	Letter	4	3	1 complaint is being processed
	Total	**58151**	**57816**	**335 complains are in progress**

Stakeholders can submit their complaints and give suggestions through the social media https://www.facebook.com/nepalelectricityauthority and https://www.twitter.com/hello_nea and through hotline number 1150 for necessary action.

RECRUITMENT DEPARTMENT

The Recruitment Department, under the Administration Directorate, made significant strides in strengthening during FY 2024/25. By continuously improving recruitment strategies and promoting internal through a structured, performance-based system, NEA has effectively aligned its staffing approach with organizational priorities.

Notably, the department also developed and implemented an online-based procedure to support the seamless execution of the digital performance appraisal system. These combined efforts have

not only advanced NEA's strategic objectives but have also contributed to building a competent and resilient workforce capable of driving sustainable institutional growth.

Recruitment Highlights

NEA continued to follow a rigorous and transparent recruitment process, ensuring the selection of qualified candidates for permanent positions. Both external and internal applicants were considered, in accordance with NEA's workforce planning framework. Particular focus was given to enhancing diversity, inclusivity, and reducing time-to-hire.

- **Selections Made:** 245 candidates were selected for permanent positions following the vacancy announcement on November 10, 2023.
- **Applications Received:** A total of 49,661 applications were received for 2,533 positions advertised on December 20, 2024.

Promotion Highlights

NEA remains committed to fostering internal career growth through a structured, transparent, and merit-based promotion system. Promotions were recommended based on a combination of performance evaluations and seniority, ensuring fairness and adherence to NEA bylaws.

- **Internal Competitive Promotions:**
  - 47 candidates were recommended for promotion through internal competition as per the November 10, 2023 vacancy.
  - A total of 2,571 applications were received for promotions through internal competition following the vacancy announcement of December 20, 2024.
- **Performance and Seniority-Based Promotions:**
  - 318 employees were promoted based on seniority and performance appraisal (Jesthata and Karyasampadana Mulyankan).
  - 198 employees were promoted through performance-based evaluation (Karyakshamata Mulyankan) in line with NEA's internal bylaws.

Open and internal competition examinations were conducted by the Public Service Commission, with final results expected to be published shortly.

Enhancement in Performance Appraisal and Promotion System

The Recruitment Department has adopted a robust and seamless performance appraisal system that objectively evaluates employees based on well-defined metrics. This approach ensures a fair and evidence-based promotion process, strengthening transparency and accountability.

Online Performance Appraisal System

NEA has implemented an online based digital performance appraisal system. This platform enables employees to submit their appraisal forms and facilitated evaluation by respective supervisors and reviewers accessing and the review committee-all through a convenient and fully digital workflow.

- A remarkable 8,249 employees-representing over 98% of NEA's workforce—successfully completed their performance appraisals online in FY 2024/25.
- The system also provides a framework to integrate Key Performance Indicators (KPI) and Key Performance Areas (KPA), improving the accuracy and effectiveness of employee evaluations.

This initiative marks a transformative step toward a merit-based, data-driven HR culture, directly linking employee performance with career development and promotion opportunities.

The Recruitment Department has adopted a fully digital, online-based system to carry out its functions, contributing to NEA's ongoing digital transformation.

LEGAL DEPARTMENT

The legal department involves in arbitration, legal drafting, bid evaluation, investigation, case study and negotiations. In FY 2024/25, the department provided 116 numbers of legal advices to the different NEA offices. During the year, 348 number of cases were registered in different Courts/ Revenue Tribunal for and against of NEA. The different Courts/Revenue Tribunal have finalized 134 number of cases, out of them, 95 verdicts were in favor of NEA and 39 cases were against the NEA, 214 cases are currently under consideration. 13 disputes on various contract of NEA have filed for arbitration. Among them, 2 cases are against NEA and 11 cases are yet to be decided.

The administrative review committee, formed according to the **Employees Services Bylaws**, in Disciplinary action related issues, 6 cases were registered in which 4 cases have been decided and 2 cases are currently under consideration. In Promotion related issues, 21 cases were registered and all cases are currently under consideration.

The administrative review committee, formed according to the **Electricity Distribution Bylaws**, 80 cases were registered in which 37 cases have been decided and 43 cases are under consideration.

FINANCE DIRECTORATE

1. Introduction

The Finance Directorate (FD), led by the DMD (Deputy Managing Director), is responsible for all of NEA's financial operations. Core responsibilities include managing revenue streams, monitoring and supervision of books of accounts, Planning & controlling budget and expenditures, handling the organization's overall finances and ensuring regulatory compliances. There are three departments under finance directorate namely Accounts, Corporate finance and Regulatory Compliance Department. Institutional Strengthening Project under this directorate has been created for implementation of revenue management (RMS) & Enterprise Resource Planning (ERP) system.

2. Operational Performance

The total available energy in FY 2024/25 of 15,641 Million Units (MU) includes NEA generation of 2,953 MU, NEA subsidiaries 2,400 MU, IPPs 8,606 MU. NEA has imported 1,681 MU energy in dry season in this year. Total of 11,343 MU has been utilized in Nepal, and 2,380 MU was exported to India. In this fiscal year, NEA has successfully become a net exporter of energy in terms of both quantum and amount. Total availability of energy has been increased by 11.99% as compared to previous year 2023/24. Total consumption inside Nepal has been increased by 10.74% in the current fiscal year. Furthermore, Export has been increased by 22.31% as compared to previous year 2023/24 of total 1,946 MU. There has been reduction in aggregate system loss from 12.73% in previous year to 12.26% this year which is the lowest system loss observed till date.

3. Number of Consumers

By the end of the fiscal year 2024/25, the number of consumers has reached 5.71 million excluding around 0.33 million consumers served by the Community Rural Electrification Program (CREP). NEA sells power to CREP in bulk and provides operational and management support.

Domestic consumers accounted for 91.08% of total electricity consumers in FY2024/25, while industrial and other consumers reported for 1.23% and 7.69% respectively.

4. Revenue

During the fiscal year 2024/25, net sales revenue was accounted to NRs 125,277 million after a rebate of NRs 1,505 million which was provided to consumers who paid on time in compliance with the electricity collection regulations. Net sales revenue has increased by 8.46% as compared to the previous year of NRs 115,505 million.

Income from other services has been slightly decreased from NRs. 10,650 million in the previous fiscal year to NRs.10,033 million in the current fiscal year. Furthermore, the finance income has decreased by 10% from NRs 3,964 million in the previous year to NRs.3,568 million in this fiscal year.

5. Cost of Sales

The overall cost of sales has increased from NRs. 88,778 million in the previous fiscal year

to NRs. 97,787 million in the current fiscal year 2024/25. All of the costs involved in generation, transmission and distribution of electricity are included in the cost of sales. The cost of generation has slightly decreased from 2,210 million in the previous year to NRs. 2,075 million in this fiscal year, while the cost of transmission has been increased by 36.67% and reached to NRs. 3,242 million in current fiscal year. Distribution costs has been decreased from NRs. 12,562 million in the previous year to NRs. 12,228 million in this fiscal year. Expenditures for power purchase has risen from NRs. 69,007 million in 2023/24 to NRs. 77,101 million in 2024/25. The royalty fee and power export service charge of NRs. 1,849 Million and NRs.1,292 Million respectively added to the total cost of sales in this year.

6. Other Costs

The expected interest expense for FY 2024/25 is NRs. 7,173 million, increased from NRs. 6,462 million in FY 2023/24. Also, the total amount on depreciation & amortization of Property, Plant & Equipment and Intangible assets amounted to NRs. 9,485 million in FY 2024/25, increased from NRs. 9,143 million in FY 2023/24. During the period the foreign exchange loss was NRs. 2,252 million. Provision amounting to NRs 2000 million has been made for employee long-term liabilities which include gratuity, pension, medical facilities, insurance, and accumulated leave in FY 2024/25.

7. Profit & Loss

The total incomes and expenditures for the current fiscal year were recorded at NRs 138,878 million and NRs 129,811 million respectively. Consequently, the net profit before tax amounted to NRs 9,067 million. After accounting for deferred tax expenses of 2,621 million, the net profit after tax reached 6,446 million. The retained earnings had increased from NRs. 46,473 million in the previous year to NRs. 52,835 million in the current year.

8. Other Non-Current Assets

Non-current assets include property, plant, and equipment (PPE), capital work in progress (CWIP), investments, loans & advances at amortized cost. NEA added gross NRs. 7,379 million in property, plant and equipment following the completion of distribution system reinforcements, rural electrification projects, substations, transmission line and distribution line projects resulting net property plant & equipment NRs 242,066 million in FY 2024/25.

NEA invested on a wide range of projects related to power generation, transmission, and distribution. The net increase in capital works in progress was NRs. 36,457 million, resulting to NRs. 257,312 million in FY 2024/25. GON equity & loans, foreign loans & grants, and NEA's internal fund were among the sources of financing. Most of the funds are utilized in electrification projects, transmission line, substation and hydro-electricity projects.

Investments in subsidiaries, associates, joint ventures, and others amounted to NRs. 49,460 million in the fiscal year 2024/25 including NRs 8,065 million fair value reserve as per NFRS till 2023/24. During this fiscal year, NRs. 3,874 million has been invested in subsidiaries, associates, and other companies.

9. Current Assets

Current assets include inventories, trade receivables, prepaid advances & deposits, short term loans to subsidiaries, cash & cash equivalents, and current tax assets. Current assets by the end of this fiscal year accounted to NRs. 76,488 million which is 11.18% of total assets. Total trade & other receivables reached NRs. 37,853 million till the end of current year, including NRs. 29,419 million from industrial consumers, NRs. 7,713 million from streetlight consumers and NRs. 6,220 million from others. Out of total trade receivables from industrial consumers, dedicated & trunkline dues totalled NRs 26,033 million including surcharge. During the period, impairment of 5500 million has been made for the trade receivables.

NEA has claimed Rs 4,660 million to GoN against COVID subsidy provided by GoN to consumers which is yet to be received.

10. Non-Current Liabilities

The total amount of long-term borrowings from the GoN, amounted to NRs. 264,673

million in fiscal year 2024/25, compared to NRs. 245,118 million in the fiscal year 2023/24. NEA has received a loan of NRs. 300 million and NRs 23,071 million from the GoN and donor agencies in FY 2024/25 respectively. Donors have committed additional loan financing of NRs. 36,418 million in the current year 2025/26 for existing and new projects.

11. Current Liabilities & Provisions

Current liabilities include trade & other liabilities and short-term borrowings. Since NEA's internal cash generation is utilized for long term construction projects, all reflected short-term borrowings as per the loan agreement with GoN are yet to be paid. Current liabilities by the end of this fiscal year accounted to NRs. 73,717 million which is 17.54% of total liabilities.

12. Equity

Equity includes the aggregate of share capital, retained earnings, and other reserves. NEA has received NRs. 2,262 million as share capital in FY 2024/25. NEA has reinvested its retained earnings into various generation, transmission, and distribution projects to enhance the reliability of power system. As a result, NEA has not yet distributed any dividends. Donors have committed NRs.2,445 million in the current year 2025/26 as grant for enhancing quality and reliability of power system.

13. Contribution to GoN treasury

NEA has contributed to GoN treasury total NRs 15,125 million in current fiscal year 2024/25 which includes royalties, interest, advance tax, VAT, Tax deduction at source (TDS) amounting to NRs. 2,104 million, 7,173 million, 2,603 million, 535 million and 2,710 million respectively.

14. Accounts & Audit

The accounts department is responsible mainly for the management of accounts, ensuring the confidentiality of financial records, preparation of financial statements, execution of statutory audits, resolution of irregularities, and interaction with tax authorities.

Since FY 2022/23, audit of the financial statements has been completed and income tax return has been filed within the time frame mandated by the Income Tax Act of 2058. Substantial amount of penalties has been saved due to timely filing of the Income tax return.

The final income tax assessment for fiscal year FY 2020/21 has been concluded by the Large Taxpayer's Office (LTO). NEA Board and audit committee periodically assesses the audit qualifications and instructs management to resolve issues. The resolution of policy-related audit qualifications is being addressed by management through the implementation of a time-bound action plan.

NEA is preparing consolidated financial statements in accordance with the Nepal Financial Reporting Standards (NFRS) from the fiscal year 2018/19. Three chartered accountants Mr. Sunir Kumar Dhungel, Mr. Jiwan Kumar Budhathoki and Mr. Prachanda Dhoj Karki has been designated by Office of the Auditor General (OAG) to carry out statutory audit for the fiscal year 2024/25 under their direct supervision. NEA anticipates successfully concluding audit within the timeframe specified by OAG for the current fiscal year.

NEA received an institutional rating of AA+ from ICRA Nepal Ltd in FY 2021/22. The surveillance activities for the fiscal year 2023/24 has been completed and reaffirmed the issuer rating at AA+.

15. Centralized Financial Systems

Finance Directorate is leading a centralized accounting project for the centralization of Accounting, Inventory and Assets Management System (AMS). With regard to Accounting and AMS system, new system has already commenced from the start of fiscal year 2024/25 after the proper migration and verification of data since FY 2059/60. Centralization system will assists in the timely preparation of the financial statements, planning & budgeting, reporting and conducting the audit in an efficient and effective way.

Vendor centralization has been successfully completed due to which we are able to control the transactions with vendors and restrict the transactions with non-filer parties from the central level. Further due to centralization of

TAX and VAT, TDS/VAT of all the offices can be deposited from the central level through a single transaction. Timely deposition of TDS/VAT could be ensured and there will be no over burden of fines/penalties to NEA because of delay deposition and conducting transactions with non-filer parties.

Moreover, NEA has planned to streamline the inventory control system and reconcile the old long time pending inter-unit transactions by fiscal year 2025/26.

16. Institutional Strengthening Project (ISP)

NEA is currently undertaking efforts to modernize its diverse operational activities with the aim of enhancing overall efficiency. NEA is engaged to enhance the effectiveness of its financial accounting and management decision support systems. Presently ISP is working with the procurement and implementation of three packages: (i) Supply and Installation of Revenue Management System (RMS) (ii) Supply and Installation of ERP based Integrated Financial Management Information System (IFMIS) and (iii) Project Management Consultant (PMC) for the supervision of implementations of IFMIS and RMS at NEA.

Regarding RMS, major milestones including requirements Gathering, Updated FRS verification, System Customization, Data Cleansing, Finalizing Data Governance List, Piloting of Data Digitization of consumers' legacy documents, pre-UAT workshops and Installation & commissioning of IT infrastructure and related software in NEA's Data Center have already been completed. NEA is heading for Pilot Go-live of the system.

Nepal Electricity Authority (NEA) intends to implement ERP based IFMIS for integrated data collection, analysis and sharing platform to address the key business challenges and share the data across various functional areas which can make its business processes efficient, more robust, and reliable to meet the present and future challenges.

The Project Management Consultant (PMC), M/s Deloitte Touche Tomatsu India LLP is already onboard and is currently assisting in preparing the budgetary estimate and RFP document of IFMIS. PMC is also supervising the implementation of Revenue Management System (RMS) for RMS Project.

17. Retirement Fund

The Retirement Fund oversees the operation and management of the Contributory Retirement Fund (RF) of NEA employees hired after 17 July 2006 as well as the Employees Security Fund (ESF) of all NEA employees. At the end of FY 2024/25, 6,506 and 8,115 employees were involved in the RF and ESF respectively. At the end of FY 2024/25, the total fund balance was 8,959 million NPR, of which 1,641 million NPR has been provided as loan to the contributors. Investments in Fixed deposits at banks and debentures amount to 7,244 million NPR at the end of FY 2024/25. The Retirement Fund also makes retirement payments of NEA's staff from FY 2022/23.

18. Regulatory Compliance Department

The Regulatory Compliance Department (RCD) is mainly responsible for conducting activities related to the economic/financial, commercial and market analysis of NEA, coordinating with Electricity Regulatory Commission (ERC), Nepal Telecom Authority (NTA) and other related regulatory bodies as a focal unit. It reviews the existing external corporate compliance rules and regulations as well as compliance provision of investment partners.

RCD has prepared the tariff petition to ERC via authorization of NEA Board abiding by the regulation of ERC. The preliminary tariff petition has prepared and presented to NEA board which is under review. In addition to this, the department has conducted the study of consumption pattern for the projection of demand and growth pattern of various categories of consumers, development of retail tariff module, study of the cost of service provided by NEA to each individual consumer categories (domestic, industrial, commercial and other categories), economic and financial analysis for NEA and regulatory compliance reporting.

Nepal Electricity Authority
Highlights of FY 2024/25

Description	FY 2025*	FY 2024	Increase/(Decrease)	
			Amount	%
Revenue				
Net Sales Revenue -Nepal (M.NRs.)	107,806	98,464	9,342	9.49
Net Sales Revenue Export(M.NRs.)	1 7,471	17,040	431	2.53
Total Revenue (M. NRs.)	**125,277**	**115,505**	**9,773**	**8.46**
Cost of Sales				
Generation Expenses (M. NRs.)	(2,075)	(2,210)	135	(6.09)
Power Purchase- Subsidaries (M. NRs.)	(10,851)	(10,732)	(119)	1.11
Power Purchase- IPPs (M. NRs.)	(53,326)	(41,473)	11,854)	28.58
Power Purchase -India (M. NRs.)	(12,923)	(16,802)	3,879	(23.09)
Royalty (M. NRs.)	(1,849)	(1,636)	(212)	12.98
Transmission Expenses (M. NRs.)	(3,242)	(2,372)	(870)	36.67
Power Service Export Charge (M. NRs.)	(1,292)	(990)	(302)	30.47
Distribution Expenses (M. NRs.)	(12,228)	(12,562)	334	(2.66)
Total Cost of Sales	**(97,787)**	**(88,778)**	**(9,009)**	**10.15**
Gross Profit	**27,490**	**26,726**	**764**	**2.86**
Income from other Services (M.NRs.)	1 0,033	10,650	(618)	(5.80)
Personnel Expenses (Inc Retirement Benefits (M.NRs.)	(6,788)	(5,863)	(925)	15.77
General Administration & Operating Expenses (M.NRs.)	(790)	(569)	(221)	38.90
Depreciation and Amortisation Expenses (M.NRs.)	(9,485)	(9,143)	(342)	3.74
Net Operating Expenses (M. NRs)	(7,030)	(4,924)	(2,106)	42.77
Operating Profit (M. NRs.)	20,460	21,802	(1,342)	(6.16)
Finance Income (M. NRs.)	3,568	3,964	(396)	(9.99)
Finance Cost (M. NRs.)	(7,173)	(6,462)	(711)	11.00
Forex Gain/(Loss) (M. NRs.)	(2,252)	334	(2,586)	(774.09)
Impairment (Charge)/ Reversal (M.NRs.)	(5,500)	(5,162)	(338)	6.55
Other Non Operating Expenses (M.NRs.)	(36)	(12)	(24)	211.21
Share of Profit/(Losses) from JV/Associates (M.NRs)	-	-	-	
Net Profit/(Loss) Before Tax(M. NRs.)	**9,067**	**14,465**	**(5,398)**	**(37.32)**
Total Available Electric Energy (GWh)	**15,641**	**13,966**	**1,675**	**11.99**
NEA Generation (GWh)	2,953	2,911	42	1.45
Purchased Energy (GWh) - Subsidaries	2,400	2,597	(197)	(7.58)
Purchased Energy (GWh) - IPPs	8,606	6,564	2,042	31.11
Purchased Energy (GWh) - India	1,681	1,895	(214)	(11.28)
Average Power Power Purchase Rate				
Average Power Purcahse Rate- (NRs./KWh)	6.08	6.24	(0.16)	(2.64)
Total Sales of Electricity (GWh)	**13,723**	**12,189**	**1,535**	**12.59**
Internal Sold/Utilized (GWh)	1 1,343	10,243	1,100	10.74
Exported Energy (GWh)	2,380	1,946	434	22.31
Average Sales Rate				
Average sales Price of Electricity Overall (NRs./kWh)	9.13	9.48	(0.35)	(3.67
Others				
Peak Load Interconnected System (GWh)	2,409	2,212	197	8.92
Self Consumption (GWh)	1 2	11	1	12.91
Net System Losses (Percentage)	12.26%	12.73%	-0.5%	(3.66)
Number of Consumers	**5,707,528**	**5 ,459,275**	**248,253**	**4.55**

Note: *Provisional figures (Subject to audit)

Nepal Electricity Authority

Statement of Financial Position

Particulars	2025*	2024	2023	2022	2021	2020	2019	2018	2017	2016
Assets										
Non Current Assets										
Property, Plant and Equipment	242,066	234,687	215,504	202,179	165,586	157,384	125,977	112,985	90,341	88,521
Capital WIP	257,312	220,855	176,423	140,231	140,484	114,300	104,841	77,607	80,272	66,684
Goodwill and Intangible Assets	536	654	38	43	48	44	-	-	-	-
Investment in Subsidaries & Associates	49,460	42,719	29,725	20,378	34,915	20,768	20,387	37,793	33,741	21,755
Deposit	376	12	1,291	1,132	992	913	912	-	-	-
Loans and Advances measured at Amortised Cost **	46,924	46,903	41,249	37,343	31,154	26,539	24,130	1,132	663	651
Tax Assets	9,253	9,253	-	-	-	-	-	-	-	-
Other Non current Assets	1,499	1,480	-	-	-	-	-	-	-	-
Total Non Current Assets	**607,426**	**556,563**	**464,230**	**401,307**	**373,178**	**318,948**	**276,247**	**229,517**	**205,018**	**177,611**
Current Assets										
Inventories	16,088	18,450	18,137	10,499	10,421	11,931	9,483	7,544	4,218	3,376
Trade and other receivables	37,853	40,220	40,978	36,533	33,488	31,492	18,854	15,951	13,955	11,187
Prepaid, Advances and Deposits	4,398	6,899	11,657	11,037	11,610	6,625	2,127	3,507	3,700	3,153
Shorterm Loan	82	82	3,222	2,680	2,435	2,226	-	-	-	-
Investment in Fixed deposit	4,387	5,643	10,021	35,884	20,800	21,950	11,450	-	-	-
Cash and Cash Equivalents	7,922	10,713	18,885	17,143	22,767	19,328	27,097	34,495	24,824	15,362
Current Tax Assets	2,603	2,000	10,073	7,350	4,444	2,946	2,412	1,909	1,611	-
Other Current Assets	3,156	3,283	-	-	-	-	-	-	-	-
Total Current Assets	**76,488**	**87,289**	**112,972**	**121,125**	**105,965**	**96,498**	**71,423**	**63,405**	**48,309**	**33,078**
Total Assets	**683,913**	**643,852**	**577,202**	**522,432**	**479,142**	**416,446**	**347,670**	**292,922**	**253,326**	**210,689**

Liabilities										
Current Liabilties										
Trade and other liabilities	65,631	61,333	58,387	59,689	53,536	52,454	56,823	59,292	54,484	51,324
Short term Borrowings**	3,000	3,000	3,000	3,000	2,658	2,116	2,087	10,711	10,619	-
Other current Liabilities	5,086	4,624	4,335	4,319	3,933	3,756	-	-	-	-
Total Current Liabilites	**73,717**	**68,957**	**65,722**	**67,009**	**60,128**	**58,326**	**58,910**	**70,003**	**65,102**	**51,324**
Non Current Liabilties										
Long Term borrowings	264,673	245,118	216,295	203,472	179,283	163,737	133,917	109,550	100,063	111,304
Deferred tax Liabilities	14,148	12,010	8,379	5,275	7,176	3,891	2,244	2,040	2,598	693
Other Non Current Liabilities	67,623	58,665	45,295	40,324	40,024	36,353	26,701	25,945	23,426	21,359
Total Non Current Liabilites	**346,445**	**315,793**	**269,970**	**249,071**	**226,482**	**203,981**	**162,862**	**137,535**	**126,087**	**133,356**
Total Liabilities	**420,162**	**384,750**	**335,692**	**316,080**	**286,610**	**262,307**	**221,773**	**207,538**	**191,189**	**184,681**
Equity										
Share Capital	207,589	206,736	199,384	175,337	161,438	140,960	128,440	102,438	82,411	58,528
Retained Earnings	52,835	46,473	33,642	24,765	11,064	4,489	(12,182)	(25,301)	(28,424)	(34,608)
Other reserves	3,328	5,893	8,484	6,250	20,030	8,690	9,639	8,247	8,150	2,089
Non Current Liabilites										
Total equity	**263,752**	**259,102**	**241,511**	**206,352**	**192,532**	**154,139**	**125,897**	**85,384**	**62,137**	**26,009**
Total Equity and Liabilites	**683,913**	**643,852**	**577,202**	**522,432**	**479,142**	**416,446**	**347,670**	**292,922**	**253,326**	**210,689**

* Provisional Figures (Subject to audit)

**Presented as per NFRS adjustments since 2017.

Nepal Electricity Authority

Statement of Proft & Loss

Particulars	2025*	2024	2023	2022	2021	2020	2019	2018	2017	2016
Sales Revenue	125,277	115,505	100,346	8 7,155	7 0,859	7 1,293	6 6,613	5 5,358	4 6,796	3 1,824
Less: Cost of Sales										
Power Purchase Cost- IPPs	(53,326)	(41,473)	(32,149)	(23,493)	(17,901)	(20,554)	(14,772)	(13,132)	(11,084)	(7,115)
Power Purchase Cost- NEA Subsidaries	(10,851)	(10,732)	(10,001)	(9,114)	(1,124)	(1,141)	(1,170)	(1,138)	(1,197)	(1,163)
Power Purchase Cost- India	(12,923)	(16,802)	(19,706)	(15,438)	(21,821)	(13,425)	(22,954)	(19,861)	(16,052)	(14,054)
Other Cost of Sales	(20,686)	(19,771)	(18,682)	(15,574)	(15,439)	(15,012)	(14,408)	(13,773)	(12,493)	(10,145)
Total Cost of Sales	**(97,787)**	**(88,778)**	**(80,538)**	**(63,619)**	**(56,285)**	**(50,132)**	**(52,134)**	**(46,766)**	**(39,629)**	**(31,314)**
Gross Profit	**27,490**	**26,726**	**19,808**	**23,536**	**14,574**	**21,161**	**14,479**	**8 ,592**	**7 ,167**	**510**
Other Income	1 0,033	1 0,650	1 0,321	1 0,111	7,881	4,783	4,785	3,186	2,471	1,792
Personnel Expenses Including retirement benefits	(6,788)	(5,863)	(6,323)	(5,867)	(5,178)	(6,285)	(4,944)	(4,215)	(3,374)	(3,039)
General Administration Expenses	(586)	(342)	(490)	(299)	(258)	(245)	(270)	(219)	(237)	(144)
Depreciation and Amortisation Expenses	(9,485)	(9,143)	(8,148)	(7,499)	(6,326)	(5,339)	(4,852)	(4,210)	(3,755)	(3,554)
Other Operating Expenses	(204)	(226)	(136)	(188)	(102)	(181)	(57)	(87)	(67)	(52)
Operating Profit	**20,460**	**21,802**	**15,033**	**19,794**	**10,591**	**13,894**	**9 ,141**	**3 ,046**	**2 ,205**	**(4,487)**
Finance Income	3,568	3,964	6,635	4 ,886	3,907	5,337	4,807	3,522	2,436	1,458
Finance cost	(7,173)	(6,462)	(5,720)	(5,977)	(5,482)	(4,537)	(3,985)	(3,283)	(3,546)	(5,080)
Other gains/(losses)/Forex	(2,252)	334	(1,542)	(1,721)	(225)	(228)	(9)	(278)	411	(746)
Impairment (Charge)/ Reversal	(5,500)	(5,162)	(632)	(1,015)	(2,552)	(1,139)	(172)	(30)	-	-
Other Non-operating Income	-	-		-	-		-	-	-	-
Other Non-operating expenses	(36)	(12)	(8)	(5)	(6)	(2)	(11)	(31)	(3)	(34)
Share of profit from investment in JV/ Associates	-	-	(1,689)	(904)	39	41	68	29	-	-
Profit before income tax	**9 ,067**	**14,465**	**12,077**	**15,058**	**6 ,272**	**13,366**	**9 ,838**	**2 ,975**	**1 ,502**	**(8,890)**

Nepal Electricity Authority

Ratios

Particulars	2025*	2024	2023	2022	2021	2020	2019	2018	2017	2016
Profitability Ratios										
Gross Profit Ratio	22%	23%	20%	27%	21%	30%	22%	16%	15%	2%
Operating Profit Ratio	16%	19%	15%	23%	15%	19%	14%	6%	5%	-14%
Net Profit Ratio	5%	9%	9%	15%	9%	16%	15%	6%	3%	-28%
Liquidity & Turnover Ratio										
Current Ratio	1.04	1.27	1.72	1.81	1.76	1.65	1.21	0.91	0.74	0.64
Quick Ratio	0.82	1.00	1.44	1.65	1.59	1.45	1.05	0.80	0.68	0.58
Interest Coverage Ratio	4.17	4.79	4.05	4.57	3.09	4.24	3.51	2.21	1.68	-0.18
Total Assets Turnover Ratio	0.18	0.18	0.21	0.17	0.15	0.17	0.19	0.19	0.18	0.15
Efficiency										
Inventory Turnover Ratio	6.08	4.81	4.44	6.06	5.40	4.20	5.50	6.20	9.40	9.27
Inventory Days	60	76	82	60	68	87	66	59	39	39
Accounts Receivable Ratio	3	3	2	2	2	2	4	3	3	3
Accounts Receivable Days	110	127	149	153	172	161	103	105	109	128
Accounts Payable Ratio	1.49	1.45	1.38	1.07	1.05	0.96	0.92	0.79	0.73	0.61
Cash Turnover	10.18	7.06	3.47	1.64	1.63	1.73	1.73	1.60	1.89	2.07
Leverage & Solvency										
Debt to Equity	1.01	0.96	0.91	1.00	0.94	1.08	1.08	1.41	1.78	4.28
Debt to Capital	0.50	0.49	0.48	0.50	0.49	0.52	0.52	0.58	0.64	0.81
Rates of Return										
Return on Equity	2%	4%	4%	6%	3%	8%	8%	4%	2%	-34%
Return on Assets	1%	2%	2%	3%	1%	3%	3%	1%	1%	-4%

Significant Accounting Policies and Explanatory Notes

For the year ended Ashad 32, 2082 (July 16, 2025)

1. CONSTITUTION AND OWNERSHIP

Nepal Electricity Authority ('NEA') was incorporated on Bhadra 1, 2042 (16 August, 1985) under the Nepal Electricity Authority Act, 1984, through the merger of the Department of Electricity of Ministry of Water Resources, Nepal Electricity Corporation and related Development Boards. The merger was necessitated to remedy the inherent weaknesses associated with these fragmented electricity organizations with overlapping and duplication of works, and became necessary to achieve efficiency and reliable service.

The principal objectives of NEA include generation, transmission and distribution of adequate, reliable and affordable electric power by planning, constructing, operating such facilities in Nepal's power system both interconnected and isolated.

2. SIGNIFICANT ACCOUNTING POLICIES

2.1 Basis of preparation of Financial Statements

The financial statements of the NEA, which comprises Statement of Financial Position, Statement of Profit or Loss & Other Comprehensive In- come, Statement of Cash Flows and Statement of Changes in Equity have been prepared in accordance with Nepal Financial Reporting Standards ("NFRS") issued by the Accounting Standards Board Nepal, which are materially in conformity with International Financial Reporting Standards ("IFRS") issued by the International Accounting Standards Board (IASB).

a. The figures for the previous year are rearranged and reclassified wherever necessary for the purpose of comparison.

b. Appropriate disclosures are made for the effect of any change in accounting policy accounting estimate and adjustment of error.

c. The financial statements are prepared, generally, on accrual basis. However, some items are accounted on a cash basis, for practical reasons. Management has adopted such practice due to impracticability for recognizing those items on accrual basis and the impact of those items are not material.

d. Management has applied estimation while preparing and presenting financial statements. Such specific estimates are disclosed in individual section wherever they have been applied.

e. The NEA's management has made an assessment of NEA's ability to continue as a going concern and is satisfied that NEA has the resources to continue in business for the foreseeable future. Furthermore, the management is not aware of any material uncertainties that may cast significant doubt upon the NEA's ability to continue as a going concern.

2.2 Functional and Presentation Currency

Items included in the financial statements of the NEA are measured and presented using the currency of the primary economic environment in which NEA operates (the functional currency), which is the Nepalese Rupees (indicated as Rs. in short).

2.3 Property, Plant and Equipment

Recognition

Property, plant and equipment are tangible items that are held for use in the production or supply of services, for rental to others or for administrative purposes and are expected to be used during more than one period. Property, plant and equipment are recognized if it is probable that future economic benefits

associated with the asset will flow to the entity and the cost of the asset can be measured reliably. NEA applies the requirements of the Nepal Accounting Standard - NAS 16 (Property, Plant and Equipment) in accounting for these assets.

Initial Measurement

An item of property, plant and equipment that qualifies for recognition as an asset is initially measured at its cost. Cost includes expenditure that is directly attributable to the acquisition of the asset and cost incurred subsequently to add and replace part of an item of property, plant & equipment. The cost of self-constructed assets includes the cost of materials and direct labor, any other costs directly attributable to bringing the asset in working condition for its intended use and the costs of dismantling and removing the items and restoring the site on which they are located. Purchased software that is integral to the functionality of the related equipment is capitalized as part of such equipment. When parts of an item of property or equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

Subsequent Measurement Cost Model

Property, Plant and equipment are stated at cost less accumulated depreciation and accumulated impairment in value. Such cost includes, cost of replacing part of the equipment when that cost is incurred, if the recognition criteria are met.

Revaluation Model

Revaluation model is applied for class of assets instead of particular assets. On revaluation of relating to the same class asset, which was charged to the Statement of Profit or Loss. Any decrease in the carrying amount is recognized as an expense in the Statement of Profit or Loss or debited to the Other Comprehensive income to the extent of any credit balance existing in the capital reserve in respect of that class of asset. In the case of reversal, the increased amount is recognized as income to the extent of previous written down value.

2.4 Depreciation/Amortization

Depreciation is provided on property, plant and equipment, except land, on straight-line method, based on the estimated useful lives of those assets. The rates of depreciation applied on property, plant and Equipment are as follows:

Assets Category		Depreciation Rate (per annum)
(a)	Land	-
(b)	Buildings	2%
(c)	Hydro Electric Structures	2%-3%
(d)	Hydro Electric Plant & Machinery	3%
(e)	Internal Combustion on plant & machinery	2.5%
(f)	Transmission lines (66 KV, 132 KV and above)	3%
(g)	Transmission lines (33 KV)	3%
(h)	Transmission Substations	3%
(I)	Distribution system (including below11 KV Transmission lines)	3%-4%
(j)	Solar Power	3%
(k)	Meter & metering equipment	10%
(l)	Consumer Services	7%
(m)	Public lighting	3%
(n)	Vehicles, tools and instruments, furniture and fixtures.	20%
(o)	Office Equipment	15%
(p)	Miscellaneous properties	50%
(q)	Additions during the year	Proportionate basis

Carrying amount of property, plant and equipment is kept at minimum value of 1 Rupee and is not depreciated further an asset, any increase in the carrying amount is recognized in 'Other Comprehensive Income' and accumulated in equity, under capital reserve or used to reverse a previous revaluation decrease.

2.5 Capital Work in Progress (CWIP)

All expenditures in developing property, plant and equipment not yet completed or not ready to use is categorized as CWIP. The value of capital works-in-progress includes stock of materials, equipment lying in store or in transit for the purpose of use in the construction or development. It also includes the balances with contractors and suppliers for the value yet to be received. These are capitalized upon commissioning or identified as being ready to use. Provisions are made for impairment and obsolescence, if any, in the value of such CWIP.

2.6 Investments and Other Financial assets

Classification

NEA classifies its financial assets in the following measurement categories:

- Fair value through Profit or loss (FVTPL)
- Fair value through other comprehensive income (FVTOCI).
- Amortized Cost

The classification depends on the entity's business model for managing the financial assets and contractual terms of the cash flows.

For assets measured at fair value, gains and losses will either be recorded in statement of profit or loss or other comprehensive income. For investment in debt instruments, this will depend on the business model in which investment is held.

Measurement

At initial recognition, NEA measures financial assets at fair value, which are classified as FVTOCI and Amortized cost. Transaction costs of financial assets carried at FVTPL are expensed in the statement of profit or loss.

Debt Instrument

Subsequent measurement of debt instrument depends on the NEA's business model for managing the asset and the cash flow characteristics of the asset.

Equity Investment

NEA subsequently measures all equity investments in subsidiaries at fair value. NEA's management has elected to present fair value gains and losses on equity. Equity investment may be classified as per business model of NEA in either FVTPL if such equities are Held for Trading or In FVTOCI if such assets are classified as Available for Sales. Changes in the fair value of financial assets at FVTPL are recognized in the statement of profit or loss whereas changes in fair value of any equity investments measured at FVTOCI are adjusted through fair value reserve.

2.7 Inventories

a. Inventories include goods in hand being held for use, sale or as spares.

b. Inventories are valued at lower of cost or net realizable value, using the weighted average method.

c. Net realizable value is the sale price as estimated by the management in the ordinary course of business, less estimated costs, if any, necessary to make the sale. Further, provision for losses and obsolescence are made for those inventories identified by management as obsolete or otherwise.

2.8 Trade Receivables

Trade receivable are stated at carrying values except for those identified by the management as being doubtful on recovery. Such estimations for doubtful recovery are reviewed by the management for impairment testing and provided as impairment allowance in case of need of impairment.

2.9 Cash and Cash equivalents

Cash and cash equivalents are carried at cost. They include cash-in-hand, cash-in-transit (bank transfers and cheques in collection which are collected in the subsequent period), and short- term deposits with banks in the various forms of deposit accounts which may or may not bear interest, but which are not of the nature of investments. Provision for loss in lieu of shortage of cash and cash equivalents are made for, if any, in the value of such cash and cash equivalents.

2.10 Share Capital

Share capital amount received in the form of cash and cash equivalent from Government of Nepal are accounted as and when received. Such amount includes initial contribution made by Government of Nepal. Eligible amounts are capitalized as share capital such as interest during construction period, grant amount received from Government of Nepal and on behalf of Government of Nepal as per the decision of Government of Nepal (Council of Ministers). Amount reflected under share allotment suspense is also categorized as Issued and Paid up share capital. Related share issue expenses incurred, if any, are deducted from Share Capital.

2.11 Reserves

Non-revenue nature incomes are presented under reserves and surplus which includes capital reserve, general reserve, insurance fund, corporate social responsibility fund and accumulated profit or losses balance. Assets created by utilizing consumer contribution are recognized at gross value corresponding amount is recognized as consumer contribution as reserve.

2.12 Corporate Social Responsibility Fund

Corporate Social Responsibility Fund is created by setting aside one percent of net profits as per the provision of Industrial Enterprises Act.

2.13 Insurance Fund

Insurance fund is created by setting aside a sum of Rs. 20 million every year, in case of profit for the year, to cover any loss of property, plant and equipment, for any eventuality.

2.14 Provision for Employees' Bonus

Provision for employees' bonus is made at the rate of 2% of net profits as per the provision of Electricity Regulations, 2050.

2.15 Borrowings

Borrowings are subsequently carried at amortized cost and any difference between the proceeds (net of Transaction costs) & the redemption value is recognized in the statement of profit or loss over the period of the borrowings using the effective interest rate method.

Further, borrowings that are due after 12 months from the date of the financial position are classified as non-current liabilities and those less than 12 months are classified as current liabilities.

2.16 Foreign Currency Loans

Liabilities on foreign currency loans at the year- end are converted into Nepali Rupees by applying prevailing year-end exchange rate. The gain / losses arising there from such transactions are recognized in Statement of Profit or Loss.

2.17 Sundry Creditors and Other Payables

Liabilities for creditors and other payables are carried at cost which is the fair value of the consideration to be paid in the future for the goods/services received, whether or not billed to the NEA.

2.18 Provisions

Provisions are recognized when the NEA has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and the reliable estimate of the amount can be made.

Recognition of Provisions involves substantial degree of estimation in measurement. Provisions are reviewed at the end of each reporting date and are adjusted accordingly to reflect the current best estimate.

2.19 Employee Benefits

Short-term obligations

Liabilities for wages and salaries, including non-monetary benefits that are expected to be settled wholly within 12 months after the end of the period in which the employees render the related service are recognized in respect of employees' services up to the end of the reporting period and are measured at the amounts expected to be paid when the liabilities are settled. The liabilities are presented as current employee benefit obligations in the Statement of Financial Position.

Other long- term employee benefit obligations

The liabilities for earned leave and sick leave are not expected to be settled wholly within 12 months after the end of the period in which the employees render the related service. They are therefore measured as the present value of expected future payments to be made in respect of services provided by employees up to the end of the reporting period using the projected unit credit method. The benefits are discounted using the market yields at the end of the reporting period that have terms approximating to the terms of the related obligation. Re-measurements as a result of experience adjustments and changes in actuarial assumptions are recognized in statement of profit or loss.

The obligations are presented as current liabilities in the Statement of Financial Position if the entity does not have an unconditional right to defer settlement for at least twelve months after the end of reporting period, regardless of when the actual settlement is expected to occur.

Post-employment obligations

NEA operates the following post-employment schemes:

- Defined benefit plans such as gratuity, pension, insurance, leave, medical facilities etc.
- Defined contribution plans such as provident fund, retirement fund etc.

Defined Benefit Plan Obligation

The liability or asset recognized in the Statement of Financial Position in respect of defined benefit plans are the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets. The defined benefit obligation is calculated annually by actuaries using the projected unit credit method.

Re-measurement gains and losses arising from experience adjustments and changes in actuarial assumptions are recognized in the period in which they occur, directly in other comprehensive income. They are included in retained earnings in the consolidated statement of changes in equity and in the Statement of Financial Position.

Defined contribution Plan

NEA pays defined contributions to publicly administered provident funds established as per prevailing laws in force. In addition to contribution to provident fund, for staff joining NEA from Shrawan 1st 2063 B.S., NEA has established equal contributory based approved retirement fund. NEA has no further payment obligations once the contributions have been paid. The contributions are accounted for as defined contribution plans and the contributions are recognized as employee benefit expense when they are due.

2.20 Grant–in-Aid and Contribution from Customer/ Local Authority

Grants-in-Aid received from the GoN or other

agencies towards capital expenditure as well as consumers' contribution to capital work are treated initially as Capital Reserve and subsequently adjusted as income in the same proportion as depreciation is charged on such assets.

2.21 Contingent Assets and Liabilities

Contingent assets and liabilities are disclosed in respect of possible present obligations that have arose from past events but their existence can only be confirmed on occurrence or non-occurrence of one or more uncertain future events not wholly within the control of NEA and possibility of outflow of resources is not determinable. A contingent asset is disclosed, where an inflow of economic benefit is probable.

2.22 Revenue from Sale of Electricity

Revenue from sale of electricity is recognized at the time of raising bills to the customers as per the billing cycle on accrual basis. Revenue from the billing cycle date up to Ashad End (Mid-July) has been recognized and is shown at gross amount.

2.23 Rebate

NEA allows rebate in order to motivate consumers to pay their electricity bills earlier than given credit period and accounted for on cash basis.

2.24 Other Income

a. Interest on loan investments and rental income are recognized on accrual basis.

b. Dividend on investment in shares is recognized when right to receive has been established.

c. Revenue from other services, including services provided for Engineering Services, is recognized on cash basis.

d. Penalty chargeable on late commercial operation date (COD) under power purchase agreement (PPA) are accounted for on cash basis.

e. Surcharge on delayed payment etc. are accounted for on cash basis.

2.25 Cost of Sales

Cost of Sales includes cost of generation, power purchase, royalties to Government of Nepal, transmission and transmission service charges. Cost of generation includes cost directly attributable to generation of electricity of NEA's power plants including distribution expenses. Power purchase cost comprises power purchase from independent power producers and power imports. Royalties to Government of Nepal accounted as per the provisions of Electricity Act and Regulations. Transmission and transmission service charge involves costs that are directly attributable to transmission of power within NEA transmission networks and transmission service charges for cross boarder power transmission.

2.26 Distribution Expenses

Distribution expenses includes cost that are directly attributable to distribution of power &expenses relating consumer services and expenses of community rural electrification expenses. Distribution expenses also includes maintenance of low voltage transmission lines and system operation costs also.

2.27 Taxes

a. Current tax

Current Tax is determined as the amount of tax payable in respect of taxable income for the year considering the applicable provisions of Income Tax Act.

b. Deferred tax

Deferred tax is recognized on temporary difference, being the difference between tax base of assets and liability and carrying amount thereto. Where there is carry forward losses, deferred tax assets are recognized only if there is virtual certainty of realization of such assets. Other deferred tax assets are recognized only to the extent

there is reasonable certainty of realization in future.

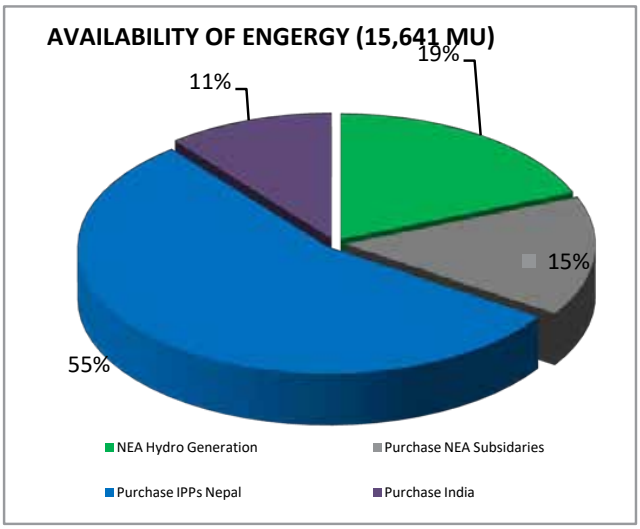
2.28 Finance Cost

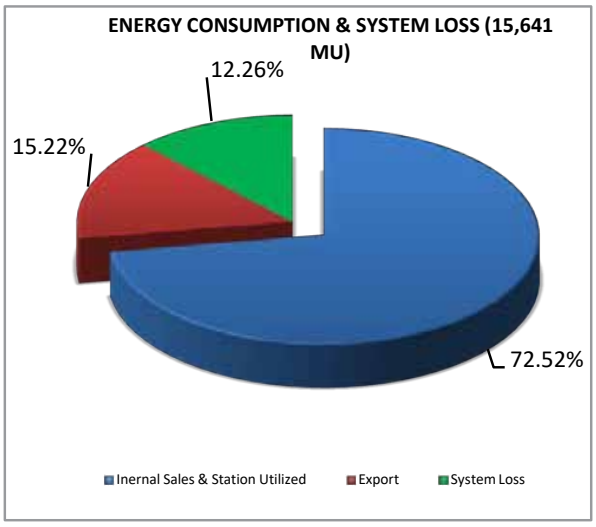
Finance costs includes borrowing cost and other interest expenses & charges on borrowings. Borrowing costs that are directly attributable to the construction of a qualifying asset are included in the cost of that asset. Other interest & charges on borrowing are treated as an expense in the period in which it occurs.

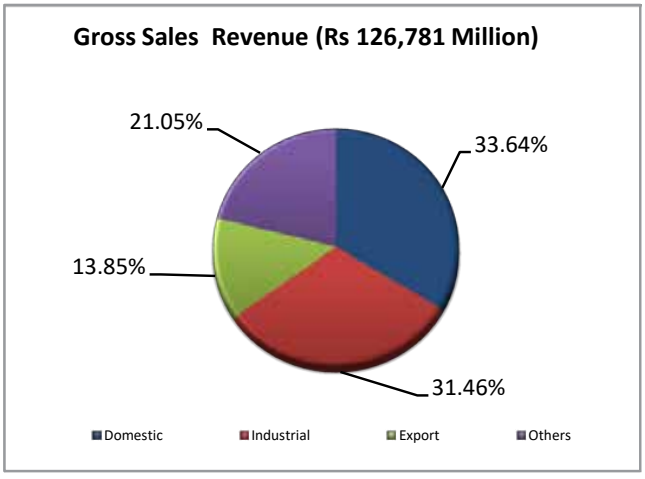
2.29 Foreign Currency Transactions

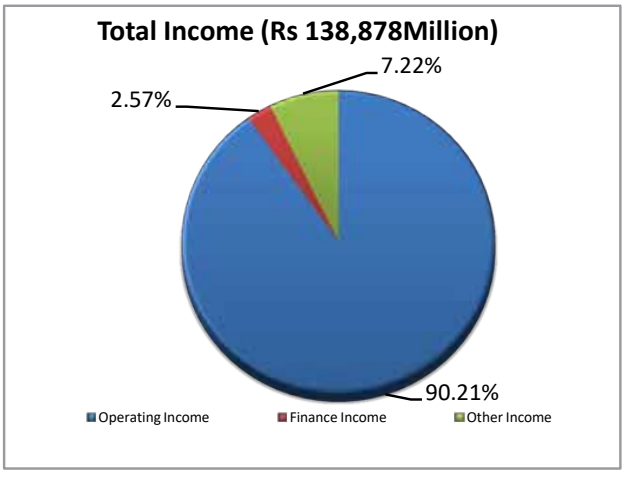
The transactions in foreign currency recognized at the prevailing rate on transaction date. The balances of monetary assets and liabilities in foreign currencies are translated at closing rate. The resulting gain or loss due to the translation is taken to Statement of Profit or Loss.

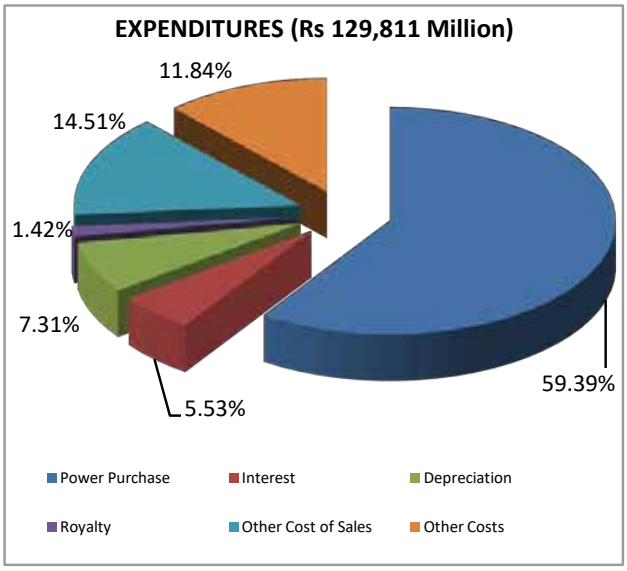
Statistics & Schematics

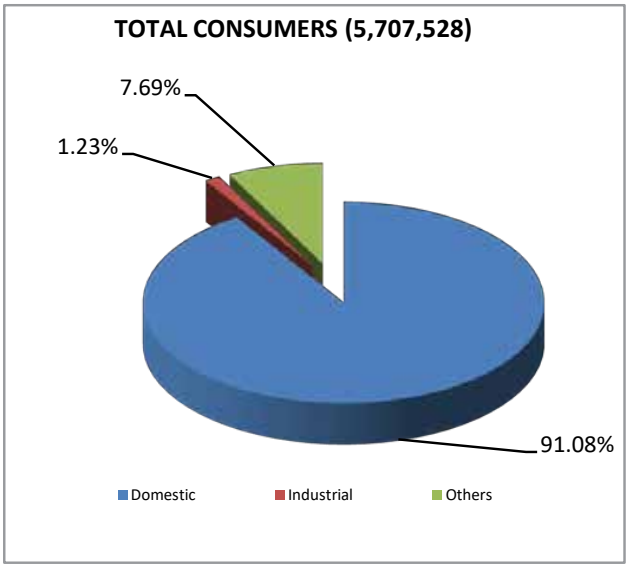






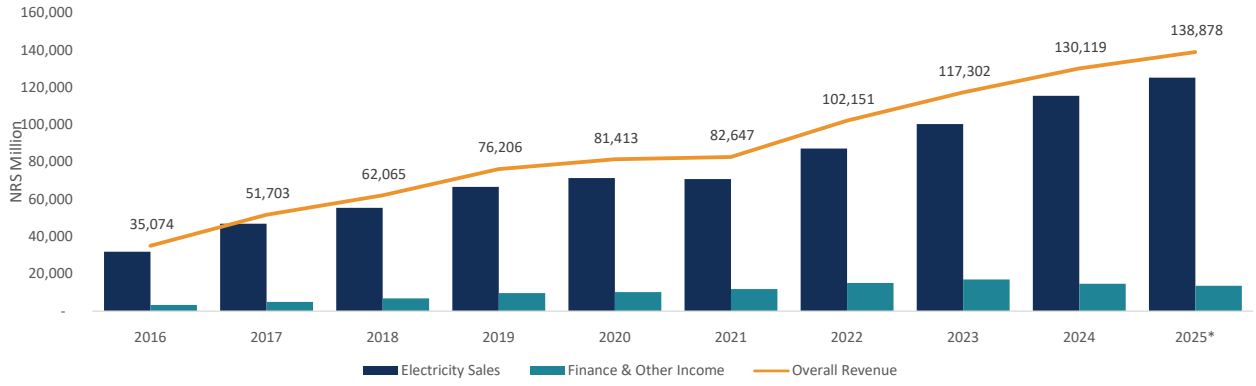




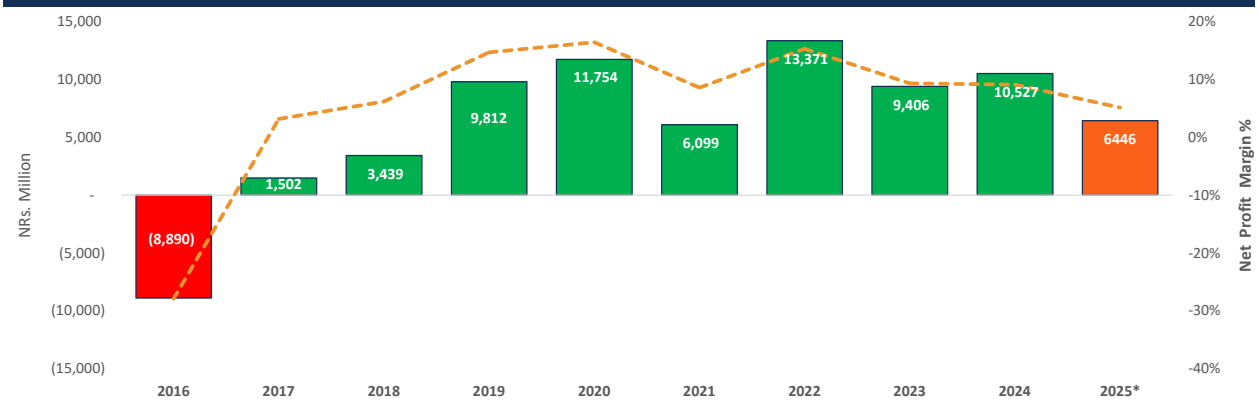


Financial Dashboard

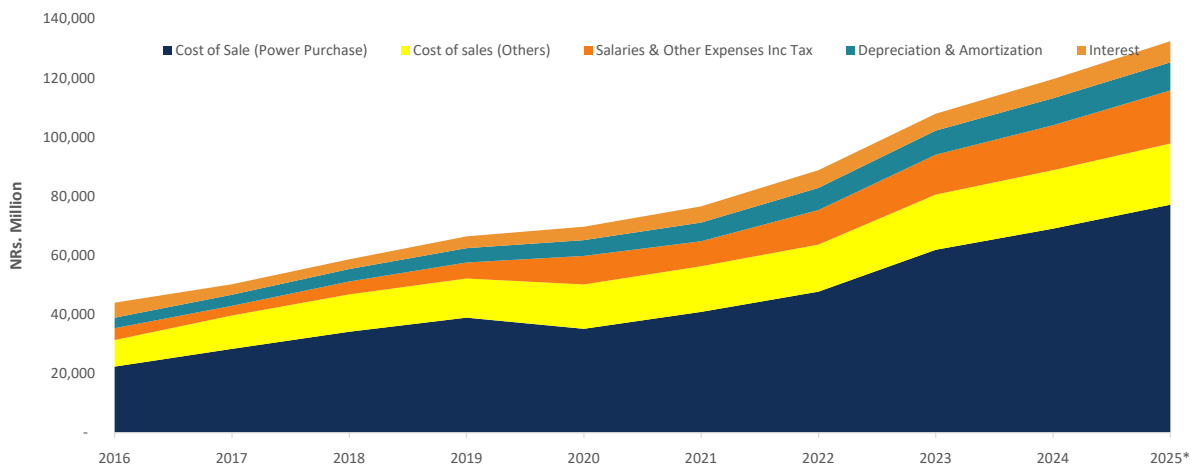
Overall Revenue Including Other Income



Profit & Loss & Net Profit Margin

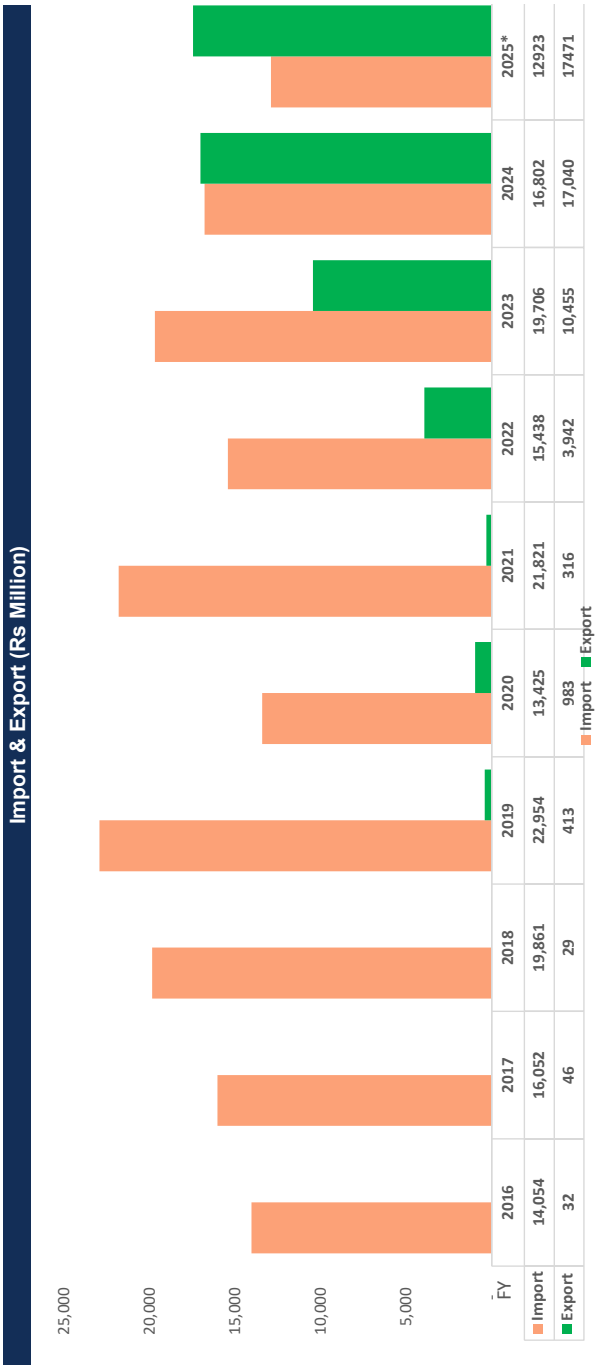


Expenses Breakup



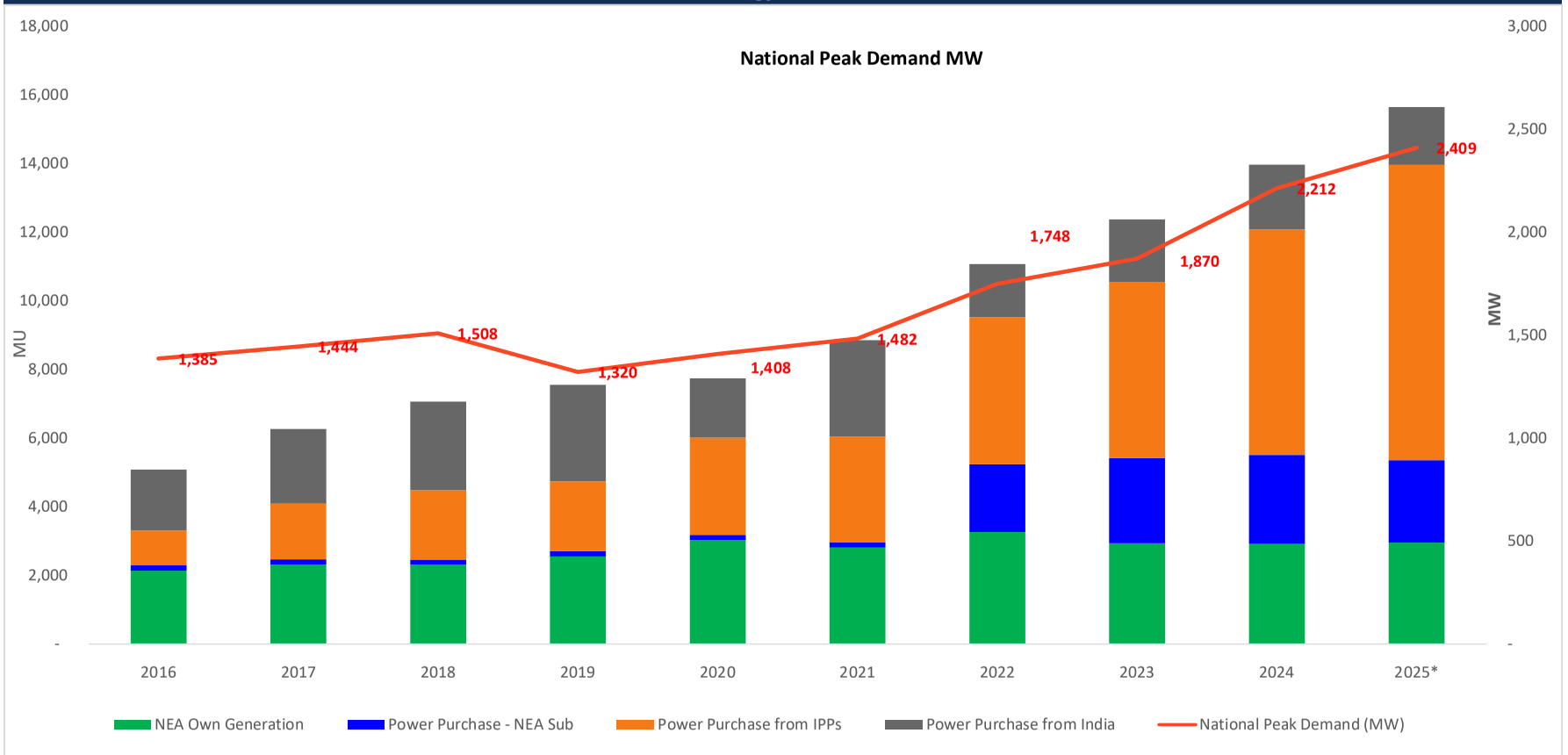
* Provisional Figures (subject to final audit)

FY	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025*
Import	1,778	2,175	2,582	2,813	1,729	2,806	1,543	1,833	1,895	1,681
Export	3	3	3	35	107	38	494	1,346	1,946	2,380



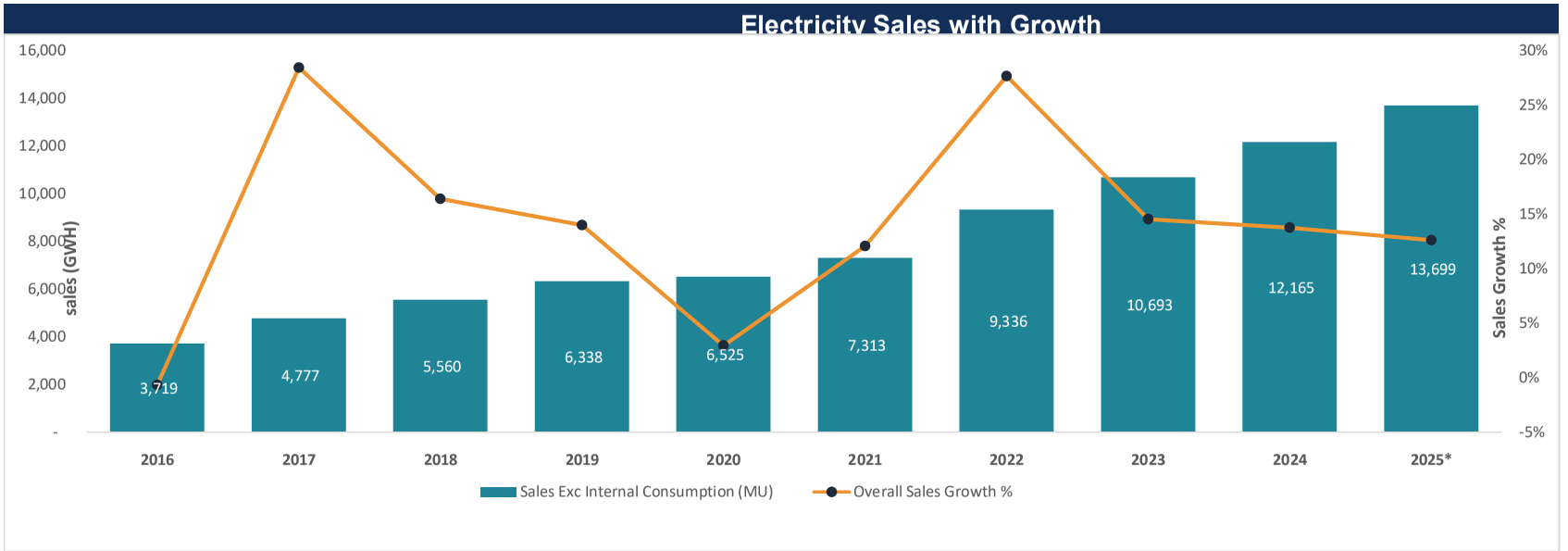
FY	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025*
Import	14,054	16,052	19,861	22,954	13,425	21,821	15,438	19,706	16,802	12923
Export	32	46	29	413	983	316	3,942	10,455	17,040	17471

Total Energy Available & Peak Demand



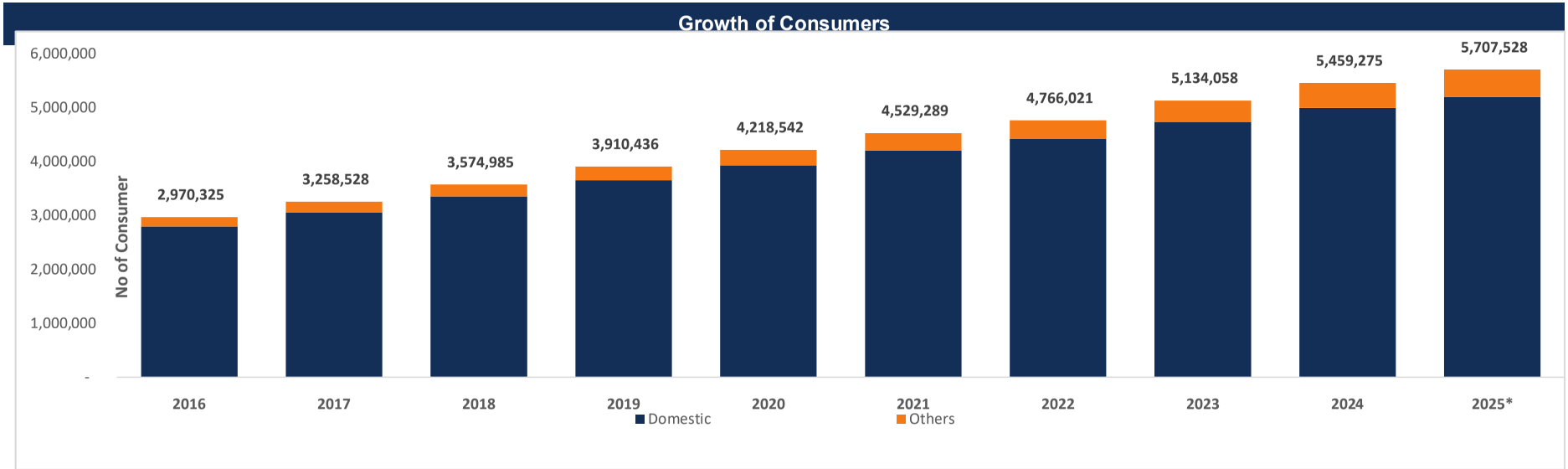
Particulars	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025*
Availability (MU)										
NEA Own Generation	2,133	2,305	2,308	2,548	3,021	2,804	3,259	2,930	2,911	2,953
Power Purchase - NEA Sub	154	155	149	157	155	148	1,976	2,488	2,597	2,400
Power Purchase from IPPs	1,012	1,623	2,019	2,033	2,836	3,093	4,286	5,118	6,564	8,606
Power Purchase from India	1,778	2,175	2,582	2,813	1,729	2,806	1,543	1,833	1,895	1,681
Total Availability (MU)	**5,077**	**6,258**	**7,058**	**7,551**	**7,741**	**8,851**	**11,064**	**12,369**	**13,966**	**15,641**
National Peak Demand (MW)	1,385	1,444	1,508	1,320	1,408	1,482	1,748	1,870	2,212	2,409
System Peak Demand Including Export (MW)							1,964	1,986	2,467	2,901

* Provisional Figures (Subject to audit)



Particulars	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025*
Sales Exc Internal Consumption (MU)	3,719	4,777	5,560	6,338	6,525	7,313	9,336	10,693	12,165	13,699
							-	-	-	-
Sales Growth %	28%	16.4%	14%	3%	3%	12%	28%	15%	14%	13%
Sales Category (GWh)										
Domestic	1,797	2,164	2,442	2,666	2,852	3,138	3,730	3,897	4,309	4,782
Non Commerical	134	161	172	186	190	204	260	276	323	347
Commercial	286	351	408	466	487	511	656	737	826	880
Industrial	1,206	1,719	2,074	2,422	2,301	2,816	3,448	3,576	3,694	4,136
Water Supply & Irrigation	100	116	138	176	182	211	242	315	405	420
Street Light	74	76	77	79	84	88	98	103	139	140
Temporary Supply	2	3	3	3	3	4	4	5	10	10
Transport	6	6	5	5	3	2	4	7	21	67
Temple	6	7	8	8	8	8	11	12	15	17
Non Domestic	-	54	103	148	151	116	187	230	288	323
Entertainment	-	1	3	6	5	4	8	10	12	16
Community Sales	104	116	125	140	151	173	193	180	175	183
Total Internal Sales (MU)	**3,716**	**4,774**	**5,557**	**6,303**	**6,418**	**7,275**	**8,842**	**9,347**	**10,219**	**11,319**
Export Sales (MU)	**3**	**3**	**3**	**35**	**107**	**38**	**494**	1,346	1,946	2,380
Internal Sales Growth %	-1%	28%	16%	13%	2%	13%	22%	6%	9%	11%
Export Sales Growth %	-	-	-	-	207%	-64%	1199%	173%	45%	22%
Overall Sales Growth %	-1%	28%	16%	14%	3%	12%	28%	15%	14%	13%

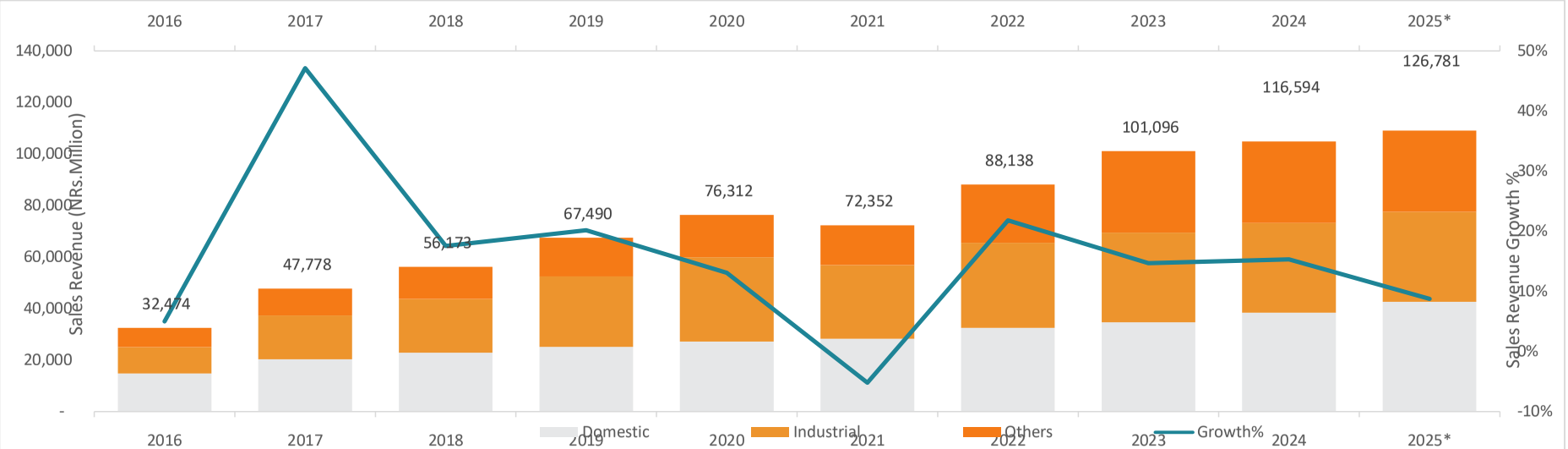
* Provisional Figures (Subject to Final Audit)



Category	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025*
Domestic	2,796,621	3,061,709	3,355,830	3,657,887	3,933,574	4,208,208	4,418,593	4,739,753	4,997,612	5,198,479
Non Commerical	17,732	19,257	21,094	23,493	26,011	29,010	31,756	36,136	38,926	41,003
Commercial	17,191	18,860	21,716	25,746	29,522	32,321	35,648	38,780	41,040	43,775
Industrial	43,639	46,345	48,800	52,697	55,888	60,782	64,626	67,360	68,831	69,978
Water Supply	1,426	1,675	2,063	2,460	2,960	3,494	4,035	4,643	5,386	6,008
Irrigation	83,283	98,626	111,493	131,935	152,485	174,917	189,193	223,034	278,195	315,611
Street Light	2,829	2,935	3,010	3,266	3,726	4,577	5,184	6,003	8,645	10,186
Temporary Supply	883	1,070	1,520	1,682	1,577	1,817	1,804	1,626	1,680	1,757
Transport	43	44	44	40	43	51	70	140	324	776
Temple	4,391	4,673	5,182	5,890	6,611	7,481	8,171	9,216	10,350	11150
Non Domestic	-	977	1,735	2,735	3,260	3,678	3,955	4,467	5,434	5875
Entertainment	-	45	107	150	170	192	212	219	245	299
Community Sales	1,537	1,597	1,631	1,659	1,882	1,882	1,901	1,808	1,726	1,717
Internal Consumption	749	714	759	795	832	878	872	872	880	913
Bulk Supply to India	1	1	1	1	1	1	1	1	1	1
Total Consumers	**2,970,325**	**3,258,528**	**3,574,985**	**3,910,436**	**4,218,542**	**4,529,289**	**4,766,021**	**5,134,058**	**5,459,275**	**5,707,528**
Growth%	**4%**	**10%**	**10%**	**9%**	**8%**	**7%**	**5%**	**8%**	**6%**	**5%**

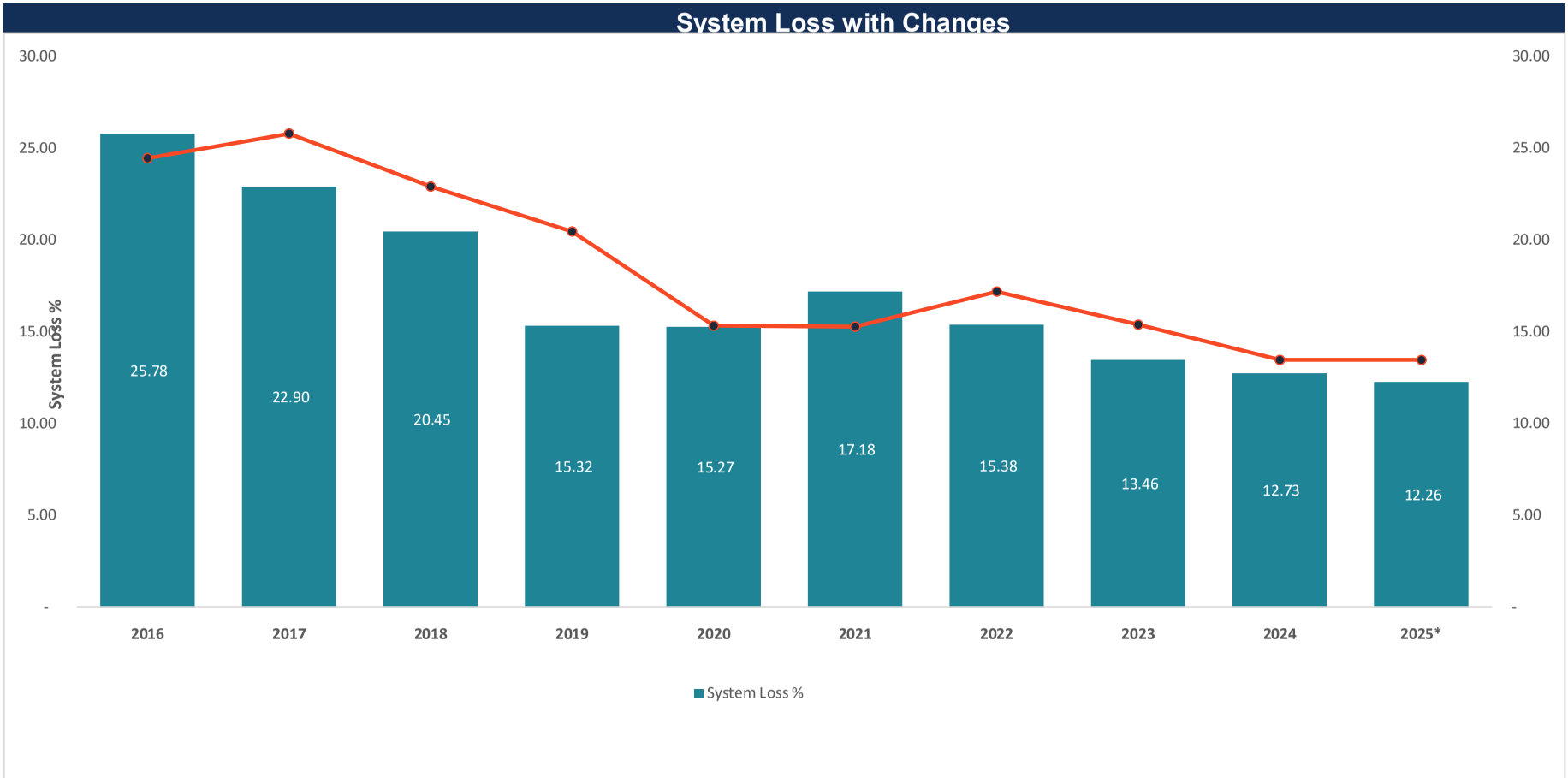
* Provisional Figures (Subject to Audit)

Category wise Gross Electricity Sales Revenue



Particulars	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025*
Domestic	14,834	20,330	22,868	25,197	27,239	28,280	32,534	34,680	38,418	42,650.92
Non Commerical	1,995	2,479	2,594	2,831	2,923	2,907	3,505	3,901	4,546	4,887.04
Commercial	3,789	5,114	5,883	6,745	7,222	7,412	9,119	10,367	11,589	12,376.83
Industrial	10,182	16,977	20,897	27,283	32,717	28,578	33,021	34,821	36,648	39,886.39
Water Supply & Irrigation	525	728	865	1,092	1,165	1,089	1,097	1,288	1,561	1,599.24
Street Light	602	666	702	683	765	801	841	895	965	979.87
Temporary Supply	29	53	61	67	64	67	76	86	169	174.53
Transport	40	44	38	33	24	19	30	53	167	503.87
Temple	34	39	51	52	52	56	73	82	98	110.71
Non Domestic	-	655	1,419	2,278	2,321	1,922	2,888	3,505	4,397	4,997.53
Entertainment	-	17	50	84	94	81	133	171	211	260.77
Community &Cooperative	412	631	716	734	743	824	878	792	760	793.78
Bulk Supply India	32	46	29	413	983	316	3,942	10,455	17,066	17,560
Total Gross Revenue	**32,474**	**47,778**	**56,173**	**67,490**	**76,312**	**72,352**	**88,138**	**101,096**	**116,594**	**126,781**
Growth%	**5%**	**47%**	**18%**	**20%**	**13%**	**-5%**	**22%**	**15%**	**15%**	**9%**

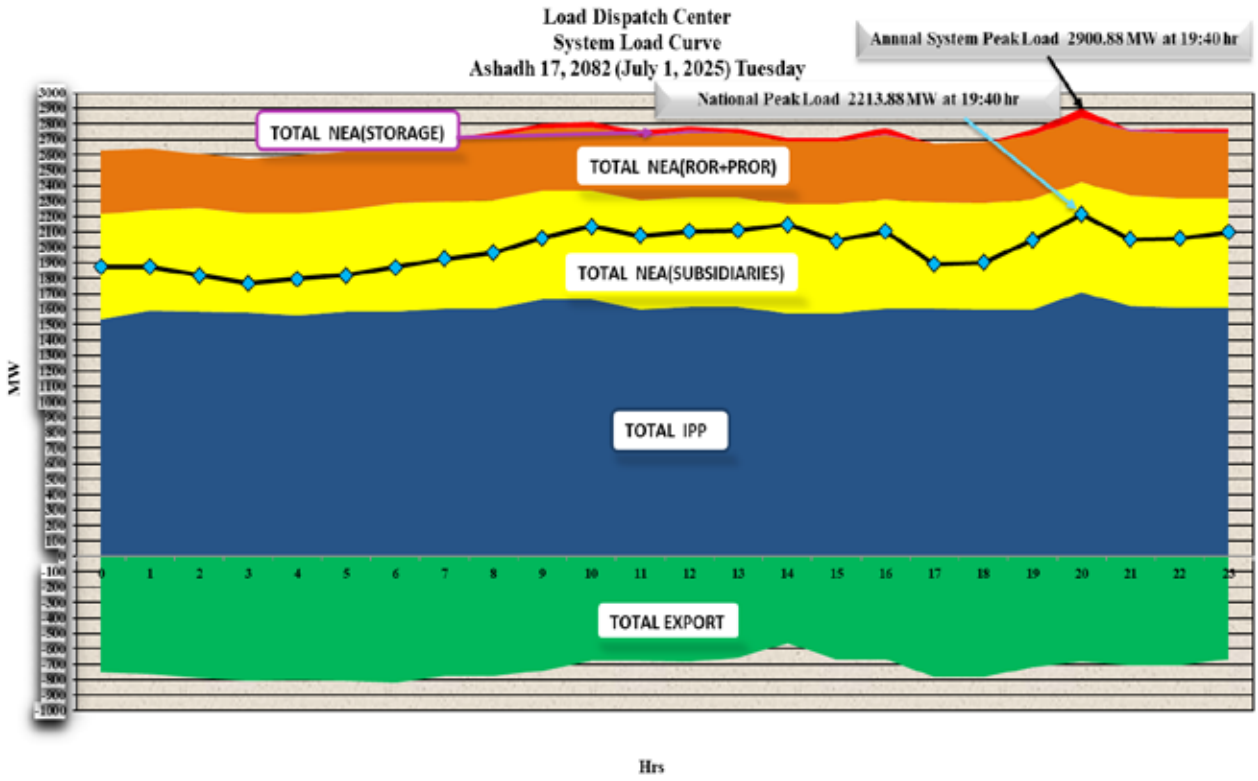
* Provisional Figures (Subject to Audit)



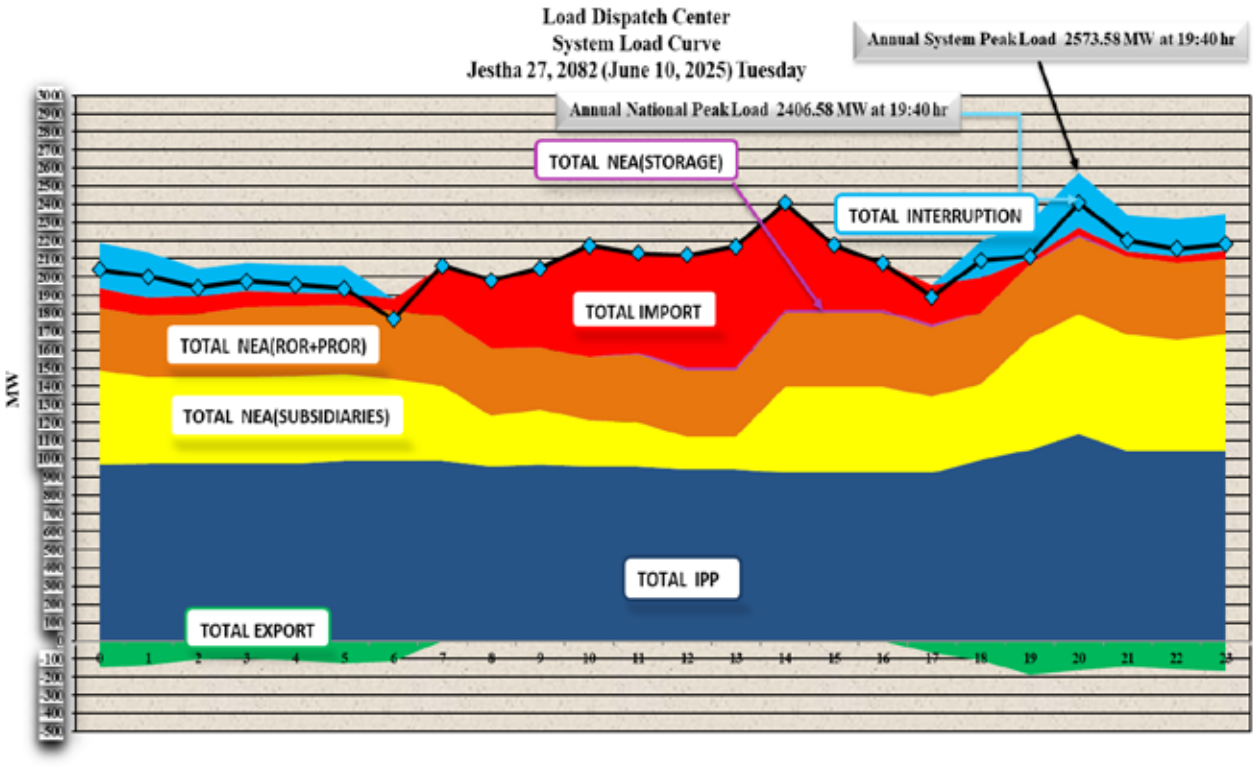
Particulars	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025*
System Loss %	25.78	22.90	20.45	15.32	15.27	17.18	15.38	13.46	12.73	12.26

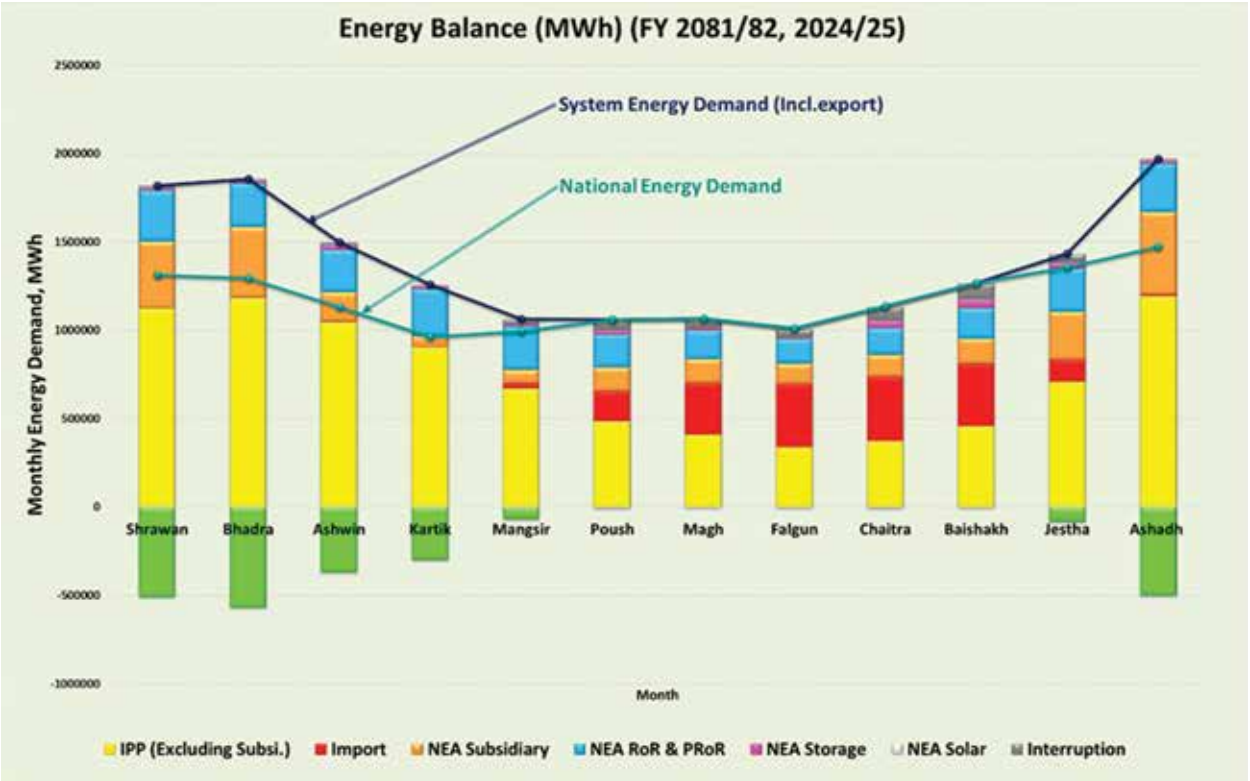
* Provisional Figures (Subject to Final Audit)

System Load Curve (Maximum Demand)
Ashadh 17, 2082 (July 1, 2025) Tuesday



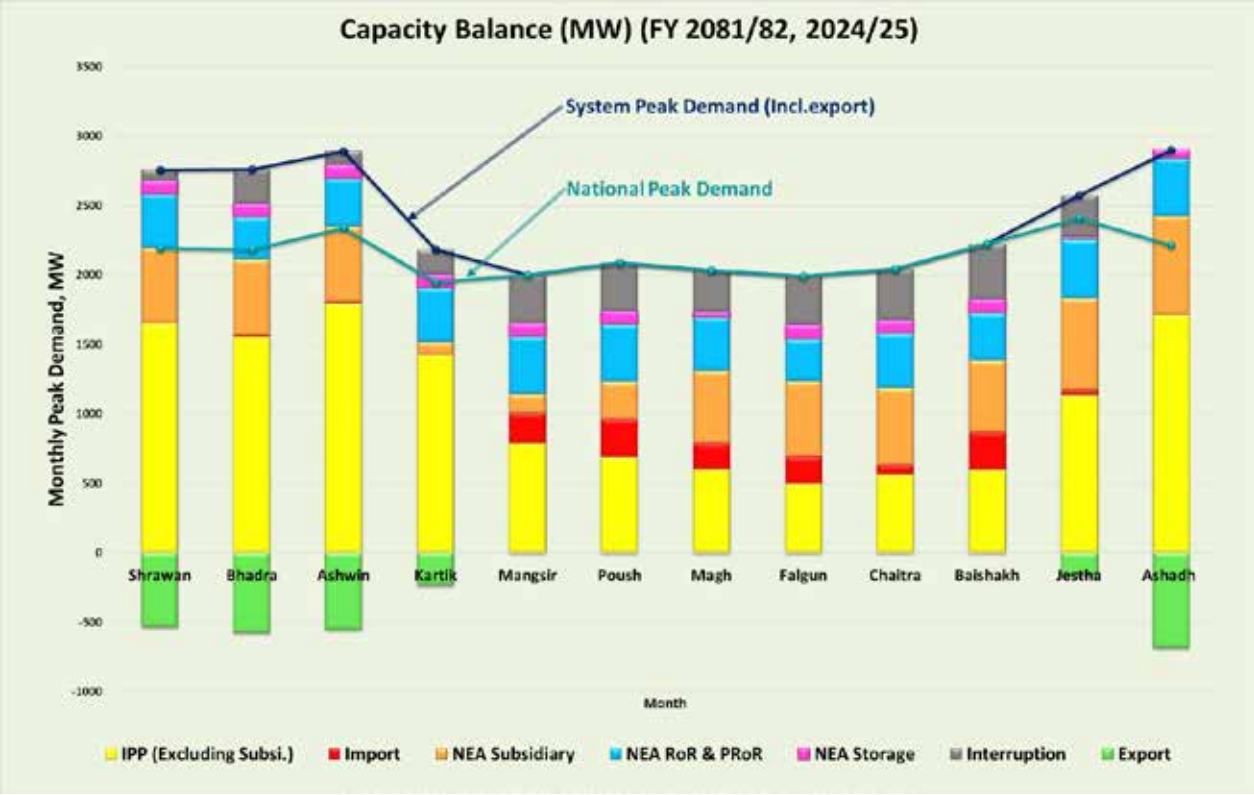
Annual System Peak Load Curve
Jestha 27, 2082 (June 10, 2025) Tuesday





Energy Balance in GWh of FY 2081/82 (2024/25)

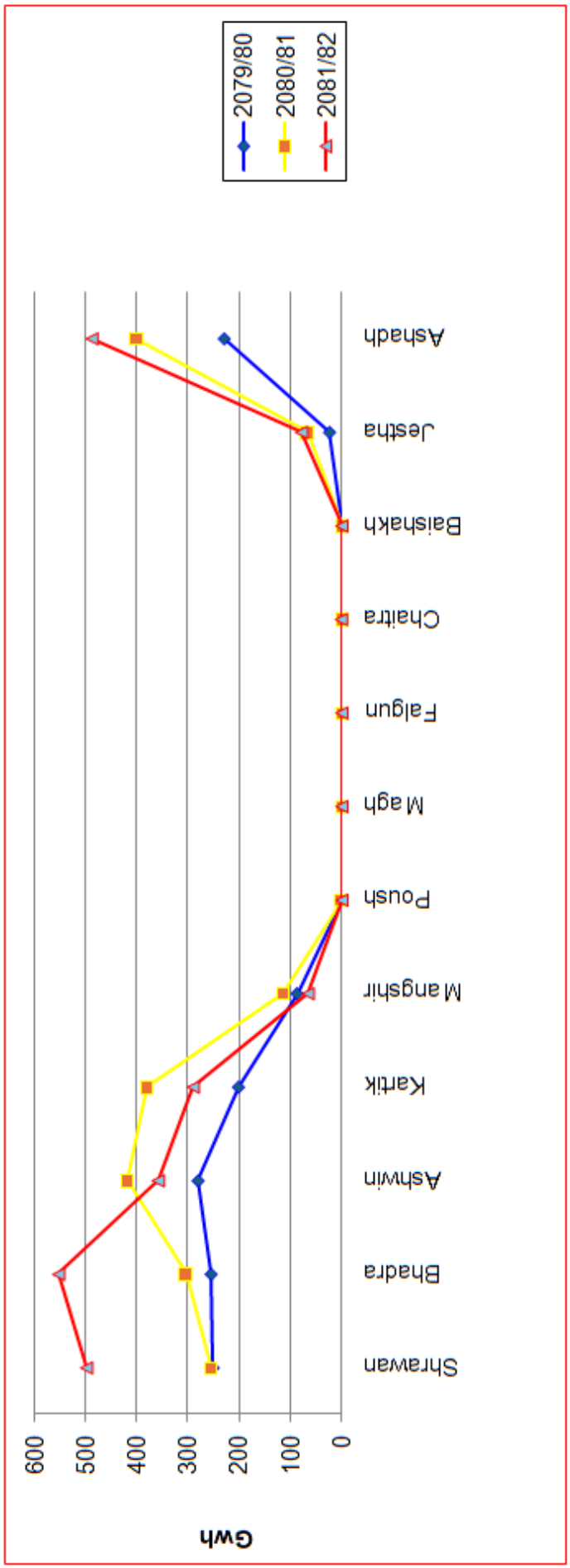
Month	Shrawan	Bhadra	Ashwin	Kartik	Mangsir	Poush	Magh	Falgun	Chaitra	Baishakh	Jestha	Ashadh	TOTAL
IPP	1126	1184	1047	905	674	487	411	341	377	460	713	1194	8918
NEA SUBSIDIARY	379	399	167	64	75	133	132	114	123	141	271	467	2464
NEA ROR & PROR	287	247	239	266	243	188	164	141	152	172	247	272	2617
IMPORT	0	2	3	0	30	172	296	357	362	354	124	10	1712
NEA STORAGE	15	15	31	18	13	24	12	6	44	50	31	20	280
NEA SOLAR	3	3	3	3	2	2	2	3	3	3	3	3	34
THERMAL	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERRUPTION	9	7	6	3	25	56	51	50	76	89	47	4	422
MONTHLY SYSTEM ENERGY DEMAND	1819	1857	1497	1259	1063	1062	1067	1013	1138	1268	1435	1970	16447
EXPORT	508	564	366	296	68	0	0	0	1	0	81	497	2380
MONTHLY NATIONAL ENERGY DEMAND	1311	1293	1131	963	995	1061	1067	1013	1136	1268	1355	1472	14067



Capacity Balance (MW) of FY 2081/82 (2024/25)

Month	Shrawan	Bhadra	Ashwin	Kartik	Mangsir	Poush	Magh	Falgun	Chaitra	Baishakh	Jestha	Ashadh
IPP	1652	1553	1791	1424	792	690	604	497	564	599	1134	1711
NEA SUBSIDIARY	543	546	545	92	138	267	521	542	552	517	660	711
NEA ROR & PROR	385	304	346	390	415	413	388	304	394	342	423	417
IMPORT	0	12	13	0	214	274	184	196	68	268	39	0
NEA STORAGE	99	95	97	97	93	97	35	102	96	97	18	62
INTERRUPTION	80	250	100	180	350	350	300	350	370	400	300	0
MONTHLY NATIONAL PEAK DEMAND	2192	2183	2337	1946	2001	2091	2032	1991	2045	2223	2409	2214
EXPORT	537	578	555	237	0	0	0	0	0	0	165	687
MONTHLY SYSTEM PEAK DEMAND	2759	2761	2892	2184	2001	2091	2032	1991	2043	2223	2574	2901

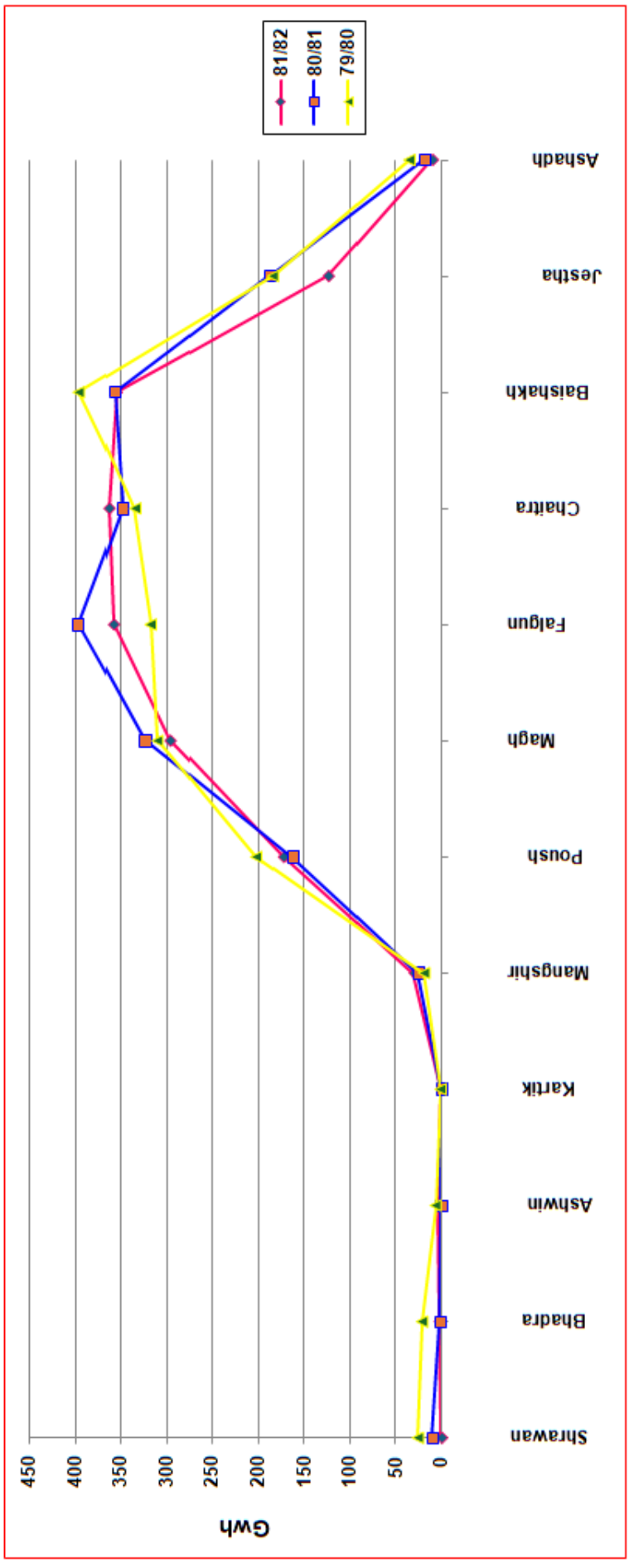
Comparison of Exported Energy (GWh) to India



Comparison of Exported Energy(GWh) to India

FY	Shrawan	Bhadra	Ashwin	Kartik	Mangshir	Poush	Magh	Falgun	Chaitra	Baishakh	Jestha	Ashadh	Total
2079/80	251.5584	255.6696	280.9730	202.2535	87.8037	0.3867	0.0000	0.0000	0.0000	0.0000	24.2048	230.0673	**1332.9170**
2080/81	255.5382	304.5849	417.8284	380.0270	114.1699	0.4349	0.0384	0.1009	0.3187	0.3071	67.9286	401.3571	**1942.6340**
2081/82	497.8630	552.3316	358.2048	289.7869	66.2297	0.1100	0.0000	0.0000	1.0960	0.0000	78.9363	487.1778	**2331.7360**

Comparison of Imported Energy (GWh) from India



Comparison of Imported Energy(GWh) from India

FY	Shrawan	Bhadra	Ashwin	Kartik	Mangshir	Poush	Magh	Falgun	Chaitra	Baishakh	Jestha	Ashadh	Total
2079/80	25.4615	20.8563	6.1199	0.5194	18.6871	202.8805	310.9881	318.4711	335.5374	395.7281	184.4009	34.8757	1854.5261
2080/81	10.3748	1.1828	0.6333	0.0898	25.6803	162.7409	324.0075	395.4887	348.7461	356.9380	187.8506	18.7939	1832.5267
2081/82	0.0000	2.4524	3.4053	0.0000	29.7911	172.3379	295.8489	357.3589	362.2620	354.4904	123.5147	10.0657	1711.5272

ANNEX-1

ELECTRICITY TARIFF

TARIFF RATES

1. Domestic Consumers

1.1 Single Phase Low Voltage (230 Voltage)

kWh (Monthly)	5 Ampere		15 Ampere		30 Ampere		60 Ampere	
	Minimum Charge (NRs.)	Energy Charge (NRs./kWh)	Minimum Charge (NRs.)	Energy Charge (NRs./kWh)	Minimum Charge (NRs.)	Energy Charge (NRs./kWh)	Minimum Charge (NRs.)	Energy Charge (NRs./kWh)
0-20	30.00	0.00	50.00	4.00	75.00	5.00	125.00	6.00
21-30	50.00	6.50	75.00	6.50	100.00	6.50	125.00	6.50
31-50	50.00	8.00	75.00	8.00	100.00	8.00	125.00	8.00
51-100	75.00	9.50	100.00	9.50	125.00	9.50	150.00	9.50
101-250	100.00	9.50	125.00	9.50	150.00	9.50	200.00	9.50
Above 251	150.00	11.00	175.00	11.00	200.00	11.00	250.00	11.00

Note: If 5 Ampere consumers use more than 20 units, they have to pay NRs.3.00 per unit for 1-20 unit.

1.2 Three Phase Low Voltage (400 Volt)

kWh (Monthly)	Up to 10 kVA			Above 10 kVA		
	Minimum Charge (NRs.)	Month	Energy Charge (NRs./kWh)	Minimum Charge (NRs.)	Month	Energy Charge (NRs./kWh)
All Consumers	1100.00	Ashad -Kartik	10.50	1800.00	Ashad -Kartik	10.50
		Marg-Jestha	11.50		Marg-Jestha	11.50

1.3 Three Phase Voltage (33/11 kV)

kWh (Monthly)	Minimum Charge (NRs.)	Month	Energy Charge (NRs/kWh)
All Consumers	10,000.00	Ashad-Kartik	10.50
		Marg-Jestha	11.00

Billing Method (For Single Phase 5 Ampere)

S. No.	kWh (Monthly)	Energy Charge (NRs./kWh)	Billing Method
1	Up to 20 units	0.00	Monthly Minimum Charge Rs. 30.00 for up to 20 units and Energy Charge Rs. 0.00 per unit
2	21 to 30 units	6.50	Monthly Minimum Charge Rs. 50.00 and Energy Charge per unit Rs. 3.00 for per unit up to 20 units and Rs. 6.50 per unit for 21 units to 30 units
3	31 to 50 units	8.00	Monthly Minimum Charge Rs. 50.00 and Energy Charge per unit Rs. 3.00 for per unit up to 20 units and Rs. 6.50 per unit for 21 units to 30 units and Rs. 8.00 per unit for 31 units to 50 units
4	51 to 100 units	9.50	Monthly Minimum Charge Rs. 75.00 and Energy Charge per unit Rs. 3.00 for per unit up to 20 units and Rs. 6.50 per unit for 21 units to 30 units and Rs. 8.00 per unit for 31 units to 50 units and Rs. 9.50 per unit for 51 units to 100 units
5	101 to 250 units	9.50	Monthly Minimum Charge Rs. 100.00 and Energy Charge per unit Rs. 3.00 for per unit up to 20 units and Rs. 6.50 per unit for 21 units to 30 units and Rs. 8.00 per unit for 31 units to 50 units and Rs. 9.50 per unit for 51 units to 250 units
6	Above 251 units	11.00	Monthly Minimum Charge Rs. 150.00 and Energy Charge per unit Rs. 3.00 for per unit up to 20 units and Rs. 6.50 per unit for 21 units to 30 units and Rs. 8.00 per unit for 31 units to 50 units and Rs. 9.50 per unit for 51 units to 250 units and Rs. 11.00 per unit for above 251 units

Billing Method (For Single Phase 15 Ampere)

S. No.	kWh (Monthly)	Energy Charge (NRs./kWh)	Billing Method
1	Up to 20 units	4.00	Monthly Minimum Charge Rs. 50.00 for up to 20 units and Energy Charge Rs. 4.00 per unit (e.g.: 5 unit: Rs. 50 + 5 × 4 = Rs. 70.00)
2	21 to 30 units	6.50	Monthly Minimum Charge Rs. 75.00 and Energy Charge per unit Rs. 4.00 for per unit up to 20 units and Rs. 6.50 per unit for 21 units to 30 units (e.g.: 25 unit: Rs. 75 + 20 × 4 + 5 × 6.5 = Rs. 187.50)
3	31 to 50 units	8.00	Monthly Minimum Charge Rs. 75.00 and Energy Charge per unit Rs. 4.00 for per unit up to 20 units and Rs. 6.50 per unit for 21 units to 30 units and Rs. 8.00 per unit for 31 units to 50 units (e.g.: 35 unit: Rs. 75 + 20 × 4 + 10 × 6.5 + 5 × 8 = Rs. 260.00)
4	51 to 100 units	9.50	Monthly Minimum Charge Rs. 100.00 and Energy Charge per unit Rs. 4.00 for per unit up to 20 units and Rs. 6.50 per unit for 21 units to 30 units and Rs. 8.00 per unit for 31 units to 50 units and Rs. 9.50 per unit for 51 units to 100 units (e.g.: 55 unit: Rs. 100 + 20 × 4 + 10 × 6.5 + 20 × 8 + 5 × 9.5 = Rs. 452.50)
5	101 to 250 units	9.50	Monthly Minimum Charge Rs. 125.00 and Energy Charge per unit Rs. 4.00 for per unit up to 20 units and Rs. 6.50 per unit for 21 units to 30 units and Rs. 8.00 per unit for 31 units to 50 units and Rs. 9.50 per unit for 51 units to 250 units (e.g.: 105 unit: Rs. 125 + 20 × 4 + 10 × 6.5 + 20 × 8 + (50 + 5) × 9.5 = Rs. 952.50)
6	Above 251 units	11.00	Monthly Minimum Charge Rs. 175.00 and Energy Charge per unit Rs. 4.00 for per unit up to 20 units and Rs. 6.50 per unit for 21 units to 30 units and Rs. 8.00 per unit for 31 units to 50 units and Rs. 9.50 per unit for 51 units to 150 units and Rs. 10.00 per unit for 151 units to above 250 units and Rs. 11.00 per unit for 251 units to 400 units. (e.g.: 255 unit: Rs. 175 + 20 × 4 + 10 × 6.5 + 20 × 8 + (50 + 150) × 9.5 + 5 × 11 = Rs. 2435.00)

Billing Methods will be similar for Single Phase 30 and 60 Ampere.

2. Other Consumers

2.1 Low Voltage (230/400 V)

Consumer Category	Demand Charge NRs./kVA/ month	Energy Charge (NRs./ kWh)
1. Industrial		
a) Rural and Domestic	60.00	7.80
b) Small Industry	110.00	9.60
2. Commercial	325.00	11.20
3. Non-Commercial	215.00	12.00
4. Irrigation	-	2.25
5. Water Supply		
a) Community Water Supply	-	4.20
b) Other Water Supply	160.00	7.20
6. Transportation		
a) Public Transportation (Charging Station)	200.00	5.75
b) Other Transportation	220.00	8.90
7. Religious Place	-	6.10
8. Street Light		
a) Metered	-	7.30
b) Non-Metered	2475.00	-
9. Temporary Supply	-	19.80
10. Non-Domestic	350.00	13.00
11. Entertainment Business	350.00	14.00

2.2 High Voltage

Consumer Category	Demand Charge NRs./ kVA/month	Energy Charge NRs./ kWh
A. High Voltage		
1. Industrial (132 kV)	230.00	8.20
2. Industrial (66 kV)	240.00	8.30
B. Medium Voltage (33 KV)		
1. Industrial	255.00	8.40
2. Commercial	315.00	10.80
3. Non-commercial	240.00	11.40
4. Irrigation	-	2.50
5. Water Supply		
a) Community Water Supply	-	4.60
b) Other Water Supply	160.00	6.60
6. Transportation		
a) Public Transportation (Charging Station)	230.00	5.60
b) Other Transportation	255.00	8.60
7. Non-Domestic	350.00	12.55
8. Entertainment Business	350.00	13.50
C. Medium Voltage (11 kV)		
1. Industrial	255.00	8.60
2. Commercial	315.00	11.10
3. Non-commercial	240.00	11.50
4. Irrigation	-	2.60
5. Water Supply		
a) Community Water Supply	-	4.80
b) Other Water Supply	150.00	6.80
6. Transportation		
a) Public Transportation (Charging Station)	230.00	5.60
b) Other Transportation	255.00	8.80
7. Religious Place	220.00	9.90
8. Temporary Connection	330.00	12.00
9. Non-Domestic	350.00	12.90
10. Entertainment Business	350.00	13.90

3. Time of Day (ToD) Tariff Rate

3.1 Tariff Rate from Baishakh to Mangsir

Consumer Category	Demand Charge NRs./ kVA/ month	Peak Time (17.00-23.00)	Off Peak Time (23.00-5.00)	Normal time (5.00-17.00)
A. High Voltage (66 kV or above)				
1. Industrial (132 kV)	230.00	10.00	4.65	8.20
2. Industrial (66 kV)	240.00	10.10	4.75	8.30
B. Medium Voltage (33 kV)				
1. Industrial	250.00	10.20	5.25	8.40
2. Commercial	315.00	12.30	6.75	10.80
3. Non-Commercial	240.00	13.20	7.00	12.00
4. Irrigation	-	6.30	2.00	3.00
5. Water Supply				
a) Community Water Supply	-	6.20	3.10	4.60
b) Other Water Supply	150.00	10.20	5.25	8.40
6. Transportation				
a) Public Transportation (Charging Station)	230.00	7.00	3.70	5.50
b) Other Transportation	255.00	9.35	3.70	8.40
7. Street Light	80.00	8.40	3.50	4.20
C. Medium Voltage (11 kV)				
1. Industrial	250.00	10.50	5.40	8.55
2. Commercial	315.00	12.60	6.90	11.10
3. Non-commercial	240.00	13.50	7.15	12.25
4. Irrigation	-	6.40	2.00	3.10
5. Water Supply				
a) Community Water Supply	-	6.30	3.40	4.70
b) Other Water Supply	150.00	10.50	5.40	8.50
6. Transportation				
a) Public Transportation (Charging Station)	230.00	7.15	4.20	5.60
b) Other Transportation	255.00	9.65	4.20	8.50
7. Street Light	80.00	8.80	3.75	4.40
8. Religious Place	220.00	11.30	5.15	9.10
9. Temporary Connection	330.00	14.40	6.60	11.75
D. Low Voltage (230/400 V)				
Transportation				
a) Public Transportation (Charging Station)	200.00	7.25	4.30	5.75
b) Other Transportation	220.00	9.75	4.30	8.60

3.2 Tariff Rate from Paush to Chaitra

Consumer Category	Demand Charge NRs. /kVA/ month	Peak Time (17.00-23.00)	Normal Time (23.00-5.00)
A. High Voltage			
1. Industrial (132 kV)	230.00	10.00	8.20
2. Industrial (66 kV)	240.00	10.10	8.30
B. Medium Voltage (33 kV)			
1. Industrial	250.00	10.20	8.40
2. Commercial	315.00	12.30	10.80
3. Non-Commercial	240.00	13.20	12.00
4. Irrigation	-	6.30	3.00
5. Water Supply			
a) Community Water Supply	-	6.20	4.60
b) Other Water Supply	150.00	10.20	8.40
6. Transportation			
a) Public Transportation (Charging Station)	230.00	7.00	5.50
b) Other Transportation	255.00	9.35	8.40
7. Street Light	80.00	8.40	4.20
C. Medium Voltage (11 kV)			
1. Industrial	250.00	10.50	8.55
2. Commercial	315.00	12.60	11.10
3. Non-commercial	240.00	13.50	12.25
4. Irrigation	-	6.40	3.10
5. Water Supply			
a) Community Water Supply	-	6.30	4.70
b) Other Water Supply	150.00	10.50	8.50
6. Transportation			
a) Public Transportation (Charging Station)	230.00	7.15	5.60
b) Other Transportation	255.00	9.65	8.50
7. Street Light	80.00	8.80	4.40
8. Religious Place	220.00	11.30	9.10
9. Temporary Connection	330.00	14.40	11.75
D. Low Voltage (230/400 V)			
Transportation			
a) Public Transportation (Charging Station)	200.00	7.25	5.75
b) Other Transportation	220.00	9.75	8.60

3.3 Transportation for Automatic Swap Card Users without Demand Charge

3.3.1 Public Transportation (Charging Station)

Description	Energy Charge NRs./kWh		
	Peak Time (17.00-23.00)	Off Peak Time (23.00-5.00)	Normal Time (5.00-17.00)
Tariff Rate from Baisakh to Mangsir			
Medium Voltage (33 kV)	8.40	4.45	6.60
Medium Voltage (11 kV)	8.60	5.05	6.70
Low Voltage (230/400 V)	8.70	5.05	6.90
Tariff Rate from Paush to Chaitra			
Description	**Peak Time (17.00-23.00)**	**Normal Time (23.00-17.00)**	
Medium Voltage (33 kV)	8.40	6.60	
Medium Voltage (11 kV)	8.60	6.70	
Low Voltage (230/400 V)	8.70	6.90	

3.3.2 Other Transportation

Description	Energy Charge NRs./kWh		
	Peak Time (17.00-23.00)	Off Peak Time (23.00-5.00)	Normal Time (5.00-17.00)
Tariff Rate from Baisakh to Mangsir			
Medium Voltage (33 kV)	11.20	4.45	10.10
Medium Voltage (11 kV)	11.60	5.05	10.20
Low Voltage (230/400 V)	11.70	5.15	10.30
Tariff Rate from Paush to Chaitra			
Description	**Peak Time (17.00-23.00)**	**Normal Time (5.00-17.00)**	
Medium Voltage (33 kV)	11.20	10.10	
Medium Voltage (11 kV)	11.60	10.20	
Low Voltage (230/400 V)	11.70	10.30	

Note: Charging Station Operators will be able to get maximum 20 percent additional charge in given tariff proving charging service to electric vehicles.

4. Community Wholesale Consumer:

Consumer Category	Minimum Charge (NRs.)	Energy Charge (NRs./kWh)
1. Medium Voltage (11kV/33kV)		
Upto (N x 20) units, monthly	N × 30.00	0.00
Above (N x 20) units, monthly		6.00
2. Lower Voltage Level (230/400 Volt)		
Upto (N x 20) units, monthly	N × 30.00	0.00
Above (N x 20) units, monthly		6.25

N= Total Number of Consumers of a Community Group

Electricity Generation Power Plants and Projects

Major Hydropower Stations		
S.N.	**Power Plants**	**Capacity(KW)**
1	Kaligandaki A	144,000
2	Middle Marsyandi	70,000
3	Marsyandi	69,000
4	Kulekhani I	60,000
5	Upper Trishuli 3A HEP	60,000
6	Kulekhani II	32,000
7	Chameliya	30,000
8	Trishuli	24,000
9	Gandak	15,000
10	Devighat	15,000
11	Modi Khola	14,800
12	Kulekhani III HEP	14,000
13	Sunkoshi	10,050
14	Puwa Khola	6,200
	Sub Total	**564,050**

Small Hydropower Plants		
S.N.	**Power Plants**	**Capacity(KW)**
1	Chatara	3,200
2	Panauti	2,400
3	Tatopani	2,000
4	Seti (Pokhara)	1,500
5	Tinau	1,024
6	Fewa	1,000
7	Sundarijal	970
8	Pharping***	500
9	Gamgad	400
10	Khandbari**	250
11	Jomsom**	240
12	Phidim**	240
13	Baglung***	200
14	Surnaiyagad	200
15	Doti***	200
16	Ramechhap	150
17	Terhathum**	100
	Sub Total	**14,574**
	Total	**578,624**

Small Hydropower Plants (Isolated)		
S.N.	**Power Plants**	**Capacity(KW)**
1	Kalikot	500
2	Heldung(Humla)	500
3	Achham	400
4	Jhupra(Surkhet)***	345
5	Darchula**	300
6	Bhojpur**	250
7	Dhankuta***	240
8	Jumla**	200
9	Syaprudaha(Rukum)**	200
10	Bajura**	200
11	Bajhang**	200
12	Dolpa	200
13	Chaurjhari(Rukum)**	150
14	Arughat(Gorkha)	150
15	Taplejung**	125
16	Okhaldhunga	125
17	Rupalgad(Dadeldhura)	100
18	Syangja***	80
19	Manang**	80
20	Gorkhe(Illam)***	64
21	Helambu	50
22	Chame**	45
23	Dhanding***	32
	Total	**4,536**

Thermal Power Plants		
S.N.	**Power Plants**	**Capacity(KW)**
1	Duhabi Multifuel	39,000
2	Hetauda Diesel	14,410
	Total	**53,410**

Total Hydro (NEA)	**583,160**
Total Major Hydro - Grid Connected	578,624
Total Small Hydro - Isolated	4,536
Total Hydro (NEA Subsidiary)	646,400
Total Hydro(IPPs)	2,160,352
Total Hydro(Nepal)	**3,389,912**
Total Thermal(NEA)	**53,410**
Total Bagasse (IPPs)	**6,000**
Total Solar(Nepal)	**141,940**
Total Solar(NEA)	25,000
Total Solar(IPPs)	116,940
Total Installed Capacity-Grid Connected	**3,586,726**
Total Installed Capacity	**3,591,262**

Under Construction Capacity(KW) - NEA Subsidiary		
S.N.	**Power Plants**	**Capacity(KW)**
1	Tanahu	140,000
2	Madhya Bhotekoshi	102,000
3	Rahughat	40,000
4	Upper Trishuli 3B	37,000
5	Tamakoshi-V	94,800
6	Upper Modi 'A'	42,000
7	Upper Modi	18,200
	Total	**474,000**

Planned and Proposed Capacity(KW)		
S.N.	**Power Plants**	**Capacity(KW)**
1	Upper Arun	1,061,000
2	Uttar Ganga Storage	828,000
3	Dudhkoshi Storage	635,000
4	Chainpur Seti	210,000
5	Aadhikhola Storage	180,000
6	Begnas Rupa Pump Storage	150,000
	Total	**3,064,000**

** Leased to Private Sector

***Not in Normal Operation

GENERATION DIRECTORATE

MONTHLY ENERGY GENERATION FY 2081/82

Power Stations/ Month	Total Actual	Shr	Bha	Asw	Kar	Man	Pou	Mag	Fal	Cha	Bai	Jes	Ash
ROR													
Kaligandaki 'A'	863,476	98,272	99,020	94,707	101,289	77,064	52,337	43,954	37,128	41,144	46,252	72,697	99,613
Mid-Marsyangdi	427,907	51,274	49,150	46,819	37,909	35,908	26,648	22,770	19,553	21,553	24,709	41,580	50,036
Marsyandi	451,792	46,653	45,939	45,721	49,520	43,246	30,455	25,631	22,339	23,567	26,694	43,900	48,128
Upper Trishuli 3A	355,973	35,325	4,163	6,050	23,033	42,640	39,815	34,760	29,105	32,158	36,223	43,010	29,693
Chameliya	142,390	17,823	18,221	17,032	13,758	11,498	8,390	7,000	6,646	8,004	9,175	12,000	12,844
Trishuli	97,699	8,308	4,699	4,520	9,235	8,827	8,780	9,991	8,298	9,457	10,046	9,286	6,253
Gandak	14,320	2,538	1,872	987	427	-	1,609	2,905	1,741	-	-	687	1,556
Modi	75,344	8,533	8,240	8,799	9,272	5,861	3,993	3,441	2,790	3,369	4,681	7,200	9,166
Devighat	76,360	6,060	3,436	3,453	7,241	7,226	7,514	7,837	6,699	7,516	7,611	7,004	4,763
Sunkoshi	60,609	5,866	6,275	6,025	6,625	6,194	4,394	3,923	3,611	3,717	3,457	4,789	5,732
Puwa	34,609	4,743	4,590	2,579	3,784	3,011	1,815	1,714	1,686	1,284	2,230	2,883	4,290
Chatara	2,312	597	558	384	302	-	10	-	-	-	-	219	242
Panauti	1,047	477	454	116	-	-	-	-	-	-	-	-	-
Seti	11,253	915	1,033	983	1,075	1,016	909	974	884	870	736	997	862
Fewa	965	114	147	208	57	110	128	95	9	-	-	-	96
Sundarijal	6,561	685	678	670	623	606	528	470	357	351	353	528	712
STORAGE													
Kulekhani I	170,563	8,586	9,045	19,215	11,275	7,983	14,543	7,030	3,532	27,269	31,097	19,141	11,847
Kulekhani II	74,946	3,724	3,959	8,240	5,101	3,626	6,437	3,155	1,544	11,870	13,451	8,566	5,273
Kulekhani III	34,277	2,050	2,246	3,894	2,595	1,810	2,851	1,501	835	4,902	5,390	3,670	2,534
THERMAL													
Multifuel	-	-	-	-	-	-	-	-	-	-	-	-	-
Hetauda Diesel	-	-	-	-	-	-	-	-	-	-	-	-	-
Total (PROR)	**2,622,615**	**288,182**	**248,474**	**239,054**	**264,151**	**243,206**	**187,323**	**165,464**	**140,846**	**152,989**	**172,165**	**246,778**	**273,984**
Total (STORAGE)	**279,785**	**14,360**	**15,249**	**31,349**	**18,971**	**13,419**	**23,830**	**11,686**	**5,911**	**44,041**	**49,937**	**31,378**	**19,654**
Total (HYDRO)	**2,902,4 01**	**302,543**	**263,723**	**270,403**	**283,122**	**256,625**	**211,153**	**177,150**	**146,757**	**197,030**	**222,102**	**278,155**	**293,638**
Total (Thermal)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Grand Total	**2,902,401**	**302,543**	**263,723**	**270,403**	**283,122**	**256,625**	**211,153**	**177,150**	**146,757**	**197,030**	**222,102**	**278,155**	**293,638**
LARGE	**2,487,046**	**261,656**	**229,495**	**237,785**	**241,884**	**221,965**	**178,624**	**144,301**	**119,846**	**165,563**	**187,599**	**240,894**	**257,433**
MEDIUM	**415,355**	**40,886**	**34,227**	**32,618**	**41,237**	**34,660**	**32,529**	**32,849**	**26,910**	**31,467**	**34,503**	**37,261**	**36,205**

GENERATION DIRECTORATE

SUMMARY OF THE NEA OWNED POWER PLANTS

Power Stations	Year	Type	Head (m)	Discharge (cum/s)	Installed Capacity (MW)	Design Gen (GWh)	Till Date Max Gen (GWh)	Runner type	Gen. Capacity (MVA)	Gen Voltage (kV)	No.of Poles/RPM	Trans. Voltage (kV)	Power Transmitted to
Kaligandaki 'A'	2002	Peaking ROR	130 (Gross) 115 (Net)	47	144	842.6	974.8 (2078/79)	Francis (vertical)	56.5	13.8	20/300	132	Butwal- 2 Ckt, Syangja-1 Ckt
Mid-Marsyangdi	2008	Peaking ROR	110 (Gross) 98 (Net)	42.4	70	397.6	471.3 (2075/76)	Francis (vertical)	39	11	18/333.3	132	Markhichowk-1 Ckt, Damauli-1 Ckt
Marsyandi	1989	Peaking ROR	90.5 (Net head)	30.5	69	467.5	483.9 (2052/53)	Francis (vertical)	30	11	20/300	132	Syuchatar-1 Ckt, Markhichowk-2 Ckt, Bharatpur- 2 Ckt
Upper Trishuli 3A	2019	ROR	144.5 (Gross head)	25.5 m^3/s	60	489.8	432.8 (2076/77)	Francis (vertical)	36	11	14/428.6	132	Trishuli 3B Hub- 2 Ckt
Kulekhani I	1982	Seasonal Storage	550 (Rated head)	6.05	60		249.7 (2056/57)	Pelton (vertical)	35	11	10/600	66	Hetauda-2 Ckt, Suichatar-2 Ckt
Kulekhani II	1986	Cascade of KL I	310 (Gross) 284.1 (Net)	8.325	32		122.8 (2056/57)	Francis (vertical)	18.8	6.6	8/750	132	Matatirtha-2 Ckt, Hetauda-2 Ckt
Chameliya	2018	Peaking ROR	103.70 (Gross) 94 (Net)	17.5	30	184.2	161.4 (2075/76)	Francis (vertical)	16.2	11	14/428.6	132	Syule Substation-2 Ckt
Trishuli	1967	Peaking ROR	51.4	7.8x3 + 8.35x4	24	163.8	154.4 (2053/54)	Francis (horizontal)	3.889	6.6	12/500	66	Chilime-1 Ckt, Devighat-1 Ckt, Balaju-2 Ckt
Gandak	1979	Canal Drop	7.59 (Gross) 6.09 (Net)	103.84	15	71.0	52.3 (2043/44)	Kaplan	5.9	6.6	56/107	132	Bardaghat-1 Ckt
Modi	2000	ROR	66.96 (Net head)	12.5	14.8	91.0	79.6 (2078/79)	Francis	8.26	6.6	14/428.6	132	Pokhara- 1 Ckt, Lower Modi-1 Ckt
Devighat	1984	Cascade of Trishuli	40.5 (Gross) 39 (Net)	15.1	15	113.0	106.3 (2056/57)	Francis (vertical)	6.25	6.6	18/333.33	66	Trishuli-1 Ckt, Chapali-2 Ckt
Kulekhani III	2019	Cascade of KL II	109.8 (Gross) 103.17 (Net)	16	14	43.3	36.2 (2078/79)	Francis (vertical)	8.56	6.6	10/600	132	Hetauda-1 Ckt
Sunkoshi	1972	ROR	30.5 (Designed head)	13.3	10.05	62.7	66.4 (2068/69)	Francis (vertical)	3.35	6.3	20/300	66	Panchkhal- 1 Ckt
Puwa	1999	ROR	304 (Net head)	1.25	6.2		37.7 (2078/79)	Pelton	3.7	6.6	10/600	33	Godak, Illam- 1 Ckt
Chatara	1996	Canal Drop	5.38	33.63	3.2	6.0	5.2 (2063/64)	Kaplan (Bevel Gear Bulb)	1.752	11	8/750-Rotor, 165-Runner	33	Dharan-1 Ckt,
Panauti	1965	ROR	66 (Gross) 60 (Net)	1.61	2.4	7.0	4.7 (2058/59)	Francis (horizontal)	1	6.3	6/1000	33	Bhaktapur-1 Ckt
Seti	1985	ROR	22.5 (Net head)	1.61	1.5	9.8	11.7 (2077/78)	Francis (horizontal)	0.625	6.3	12/500	11	Kuder-1 Ckt
Fewa	1969	Canal Drop	74.68 (Net head)	-	1	6.5	3.9 (2034/35)	Francis (horizontal)	0.272	0.4	6/1000	11	Kuder-1 Ckt
Sundarijal	1934	ROR	216 (Net head)	0.76	0.97	4.8	6.1 (2078/79)	Pelton (horizontal)	6	3.3	8/750	11	Chahbil- 1 Ckt
Pharping	1911	Pondage	208	-	0.5		(2064/65)	Pelton (horizontal)	0.313	3.3	10/600	11	-
Multifuel	1990	Thermal (Furnace Oil & Diesel Fueled)	-	-	1.5		86.2 (2055/56)		7.5 (4 Units) & 8.144 (2 Units)	11	8/750	33	Duhabi-2 Ckt
Hetauda Diesel	1963	Thermal (Diesel Fueled)	-	-	2.5		24.2 (2055/56)		3.125 & 1.8625	11	0	11	Hetauda-1 Ckt

NEPAL ELECTRICITY AUTHORITY
POWER TRADE DEPARTMENT
Status of IPPs and NEA's Subsidiary Companies owned Power Projects (Operation) as of FY 2081/82

S.N.	Developer	Projects	Location	Installed Capacity (kW)	PPA Date	Commercial Operation Date
Hydropower Projects (NEA's Subsidiary Companies)						
1	Chilime Hydro Power Company Ltd.	Chilime	Rasuwa	22100	2054.03.11	2060.05.08
2	Upper Tamakoshi Hydropower Ltd.	Upper Tamakoshi	Dolkha	456000	2067.09.14	2078.05.04
3	Sanjen Hydropower Co.Limited	Upper Sanjen	Rasuwa	14800	2068.06.23	2080.06.21
4	Sanjen Hydropower Company Limited	Sanjen	Rasuwa	42500	2068.08.19	2081.09.01
5	Rasuwagadhi Hydropower Company Ltd.	Rasuwagadhi	Rasuwa	111000	2068.07.28	2081.09.16
			SUB-TOTAL	**646400**		
Hydropower Projects (IPPs)						
1	Himal Power Ltd.	Khimti Khola	Dolakha	60000	2052.10.01	2057.03.27
2	Bhotekoshi Power Company Ltd.	Upper Bhotekoshi Khola	Sindhupalchowk	45000	2053.04.06	2057.10.11
3	Syange Electricity Company Limited	Syange Khola	Lamjung	183	2058.10.03	2058.10.10
4	National Hydro Power Company Ltd.	Indrawati - III	Sindhupalchowk	7500	2054.09.15	2059.06.21
6	Butwal Power Company Ltd.	Jhimruk Khola	Pyuthan	12000	2058.03.29	2051.05.01
7	Butwal Power Company Ltd.	Andhi Khola	Syangza	9400	2058.03.29	2071.12.22
8	Arun Valley Hydropower Development Co. (P.) Ltd.	Piluwa Khola Small	Sankhuwasabha	3000	2056.10.09	2060.06.01
9	Rairang Hydro Power Development Co. (P) Ltd.	Rairang Khola	Dhading	500	2059.08.27	2061.08.01
10	Sanima Hydropower (Pvt.) Ltd.	Sunkoshi Small	Sindhupalchowk	2500	2058.07.28	2061.12.11
11	Alliance Power Nepal Pvt.Ltd.	Chaku Khola	Sindhupalchowk	3000	2056.11.03	2062.03.01
12	Khudi Hydropower Ltd.	Khudi Khola	Lamjung	4000	2058.03.04	2063.09.15
13	Unique Hydel Co. Pvt.Ltd.	Baramchi Khola	Sindhupalchowk	4200	2058.12.14	2063.09.27
14	Thoppal Khola Hydro Power Co. Pvt. Ltd.	Thoppal Khola	Dhading	1650	2059.11.23	2064.07.13
15	Gautam Buddha Hydropower (Pvt.) Ltd.	Sisne Khola Small	Palpa	750	2061.04.29	2064.06.01
16	Kathmandu Small Hydropower Systems Pvt. Ltd.	Sali Nadi	Kathmandu	250	2062.04.24	2064.08.01
17	Khoranga Khola Hydropower Dev. Co. Pvt. Ltd.	Pheme Khola	Panchthar	995	2057.12.31	2064.08.05
18	Unified Hydropower (P.) Ltd.	Pati Khola Small	Parbat	996	2062.10.28	2065.10.27
19	Task Hydropower Company (P.) Ltd.	Seti-II	Kaski	979	2063.06.08	2065.11.14
20	Ridi Hydropower Development Co. (P.) Ltd.	Ridi Khola	Gulmi	2400	2063.05.08	2066.07.10
21	Centre for Power Dev. And Services (P.) Ltd.	Upper Hadi Khola	Sindhupalchowk	991	2064.04.07	2066.07.22
22	Gandaki Hydro Power Co. Pvt. Ltd.	Mardi Khola	Kaski	4800	2060.07.07	2066.10.08
23	Himal Dolkha Hydropower Company Ltd.	Mai Khola	Ilam	4455	2063.11.19	2067.10.14
24	Baneswor Hydropower Pvt. Ltd.	Lower Piluwa Small	Sankhuwasabha	990	2064.07.21	2068.04.01
25	Barun Hydropower Development Co. (P.) Ltd.	Hewa Khola	Sankhuwasabha	4455	2061.04.02	2068.04.17
26	Bhagawati Hydropower Development Co. (P.) Ltd.	Bijayapur-1	Kaski	4410	2066.03.30	2069.05.04
28	Ngadi Group (P.) Ltd.	Siuri Khola	Lamjung	4950	2064.04.17	2069.07.30
29	United Modi Hydropwer Pvt. Ltd.	Lower Modi 1	Parbat	10000	2065.10.20	2069.08.10
30	Synergy Power Development (P.) Ltd.	Sipring Khola	Dolakha	9658	2065.10.20	2069.10.03
31	Laughing Buddha Power Nepal (P.) Ltd.	Middle Chaku	Sindhupalchowk	1800	2066.11.03	2069.11.15
32	Aadishakti Power Dev. Company (P.) Ltd.	Tadi Khola (Thaprek)	Nuwakot	5000	2061.12.15	2069.12.14
33	Ankhu Khola Jal Bidhyut Co. (P.) Ltd.	Ankhu Khola - 1	Dhading	8400	2066.02.22	2070.05.05
34	Nepal Hydro Developer Pvt. Ltd.	Charanawati Khola	Dolakha	3520	2067.01.13	2070.02.24
35	Laughing Buddha Power Nepal Pvt. Ltd.	Lower Chaku Khola	Sindhupalchowk	1800	2063.07.02	2070.04.24

36	Bhairabkunda Hydropower Pvt. Ltd.	Bhairab Kunda	Sindhupalchowk	3000	2065.08.02	2071.02.22
37	Radhi Bidyut Company Ltd.	Radhi Khola	Lamjung	4400	2066.10.18	2071.02.31
38	Pashupati Environmental Eng. Power Co. Pvt. Ltd.	Chhote Khola	Gorkha	993	2067.11.09	2071.03.09
39	Mailung Khola Hydro Power Company (P.) Ltd.	Mailung Khola	Rasuwa	5000	2058.04.09	2071.03.19
40	Joshi Hydropower Development Company Limited	Upper Puwa -1	Illam	3000	2066.01.23	2071.10.01
41	Sanima Mai Hydropower Limited	Mai Khola	Ilam	22000	2067.01.08	2071.10.14
42	Bojini Company Private Limited	Jiri Khola Small	Dolakha	2200	2065.10.23	2071.11.01
43	Ruru Hydropower Project (P) Ltd.	Upper Hugdi Khola	Gulmi	5000	2066.04.04	2071.12.09
44	Prime Hydropower Co. Pvt. Ltd.	Belkhu	Dhading	518	2064.04.04	2071.12.30
45	Api Power Company Pvt. Ltd.	Naugadh gad Khola	Darchula	8500	2067.01.19	2072.05.02
46	Kutheli Bukhari Small Hydropower (P).Ltd	Suspa Bukhari	Dolakha	998	2069.04.32	2072.06.03
47	Sanima Mai Hydropower Ltd.	Mai Cascade	Ilam	7000	2069.10.12	2072.10.29
48	Chhyangdi Hydropower Limited	Chhandi	Lamjung	2000	2068.12.23	2072.12.13
49	Panchakanya Mai Hydropower Ltd. (Previously Mai Valley and prior to that East Nepal)	Upper Mai Khola	Ilam	9980	2061.12.19	2073.03.09
50	Sayapatri Hydropower Private Limited	Daram Khola A	Baglung	2500	2068.12.19	2073.03.12
51	Electro-com and Research Centre Pvt. Ltd.	Jhyadi Khola	Sindhupalchowk	2000	2067.01.30	2073.05.31
52	Khani Khola Hydropower Company Pvt. Ltd.	Tungun-Thosne	Lalitpur	4360	2069.04.05	2073.07.09
53	Daraudi Kalika Hydro Pvt. Ltd.	Daraudi Khola A	Gorkha	6000	2068.05.19	2073.08.13
54	Khani Khola Hydropower Company Pvt. Ltd.	Khani Khola	Lalitpur	2000	2069.04.05	2073.08.20
55	Sapsu Kalika Hydropower Co. Pvt. Ltd.	Miya Khola	Khotang	996	2069.08.10	2073.09.03
56	Sinohydro-Sagarmatha Power Company (P) Ltd.	Upper Marsyangdi "A"	Lamjung	50000	2067.09.14	2073.09.17
57	Madi Power Pvt. Ltd.	Upper Madi	Kaski	25000	2066.05.21	2073.09.25
58	Panchthar Power Company Pvt. Ltd.	Hewa Khola A	Panchthar	14900	2068.05.30	2073.10.22
59	Sanvi Energy pvt. Ltd.	Jogmai	Ilam	7600	2069.08.07	2074.01.18
60	Bhugol Energy Dev Compay (P). Ltd	Dwari Khola	Dailekh	3750	2069.12.30	2074.01.23
61	Mai Valley Hydropower Private Limited	Upper Mai C	Ilam	5100	2068.12.23	2074.04.09
62	Dronanchal Hydropower Co.Pvt.Ltd	Dhunge-Jiri	Dolakha	600	2068.09.25	2074.06.01
63	Dibyaswari Hydropower Limited	Sabha Khola	Sankhuwasabha	4000	2068.11.17	2074.06.02
64	Puwa Khola-1 Hydropower P. Ltd.	Puwa Khola -1	Ilam	4000	2070.10.09	2074.06.23
65	Shibani Hydropower Co. Pvt. Ltd.	Phawa Khola	Taplejung	4950	2063.12.01	2074.07.14
66	Mount Kailash Energy Pvt. Ltd.	Thapa Khola	Myagdi	13600	2067.10.11	2074.08.22
67	Mandakini Hydropower Limited	Sardi Khola	Kaski	4000	2068.11.11	2074.08.23
68	Garjang Upatyaka Hydropower (P.) Ltd.	Chake Khola	Ramechhap	2830	2065.11.06	2074.08.28
69	Union Hydropower Pvt Ltd.	Midim Karapu	Lamjung	3000	2069.10.28	2074.10.15
70	Syauri Bhumey Microhydro Project	Syauri Bhumey	Nuwakot	23	2072.11.16	2074.10.18
71	Molung Hydropower Company Pvt. Ltd.	Molung Khola	Okhaldhunga	7000	2069.11.21	2074.12.12
72	Sikles Hydropower Pvt. Ltd.	Madkyu Khola	Kaski	13000	2066.08.03	2074.12.19
73	Himal Dolkha Hydropower Company Ltd.	Mai sana Cascade	Ilam	8000	2069.11.14	2074.12.26
74	Barahi Hydropower Pvt.ltd	Theule Khola	Baglung	1500	2066.12.16	2075.03.24
75	Leguwa Khola Laghu Jalbidhyut Sahakari Sastha Ltd.	Leguwa Khola	Dhankuta	40	2072.11.21	2075.03.28
76	Super Mai Hydropower Pvt. Ltd.	Super Mai	Illam	7800	2073.12.06	2075.07.11
77	Chimal Gramin Bidhyut Sahakari Sanstha Ltd.	Sobuwa Khola-2 MHP	Taplejung	90	2074.11.15	2075.07.14
79	Deurali Bahuudesiya Sahakari Sanstha Ltd.	Midim Khola	Lamjung	100	2070.02.20	2075.09.04
80	Bindhyabasini Hydropower Development Co. (P.) Ltd.	Rudi Khola A	Lamjung and Kaski	8800	2069.10.28	2075.12.04
81	Mandu Hydropower Ltd.	Bagmati Khola Small	Makawanpur/ Lalitpur	22000	2069.10.07	2075.12.19
82	Salmanidevi Hydropower (P). Ltd	Kapadi Gad	Doti	3330	2069.12.11	2076.02.25

83	Eastern Hydropower Pvt. Ltd.	Pikhuwa Khola	Bhojpur	5000	2066.07.24	2076.02.27
84	Mountain Hydro Nepal Pvt. Ltd.	Tallo Hewa Khola	Panchthar	22100	2071.04.09	2076.04.21
85	Pashupati Environmental Power Co. Pvt. Ltd.	Lower Chhote Khola	Gorkha	997	2072.08.04	2076.05.20
86	United Idi Mardi and R.B. Hydropower Pvt. Ltd.	Upper Mardi	Kaski	7000	2073.02.25	2076.06.20
87	Rairang Hydropower Development Company Ltd.	Iwa Khola	Taplejung	9900	2070.01.29	2076.06.20
88	Api Power Company Pvt. Ltd.	Upper Naugad Gad	Darchula	8000	2073.07.12	2076.07.13
89	Arun Kabeli Power Ltd.	Kabeli B-1	Taplejung, Panchthar	25000	2069.03.29	2076.07.23
90	Rangoon Khola Hydropower Pvt. Ltd.	Jeuligad	Bajhang	996	2071.10.20	2076.08.27
91	Dolti Power Company Pvt. Ltd.	Padam Khola	Dailekh	4800	2074.08.01	2076.09.08
92	Bindhyabasini Hydropower Development Co. (P.) Ltd.	Rudi Khola B	Lamjung and Kaski	6600	2071.4.20	2076.11.05
93	Ghalemdi Hydro Limited (Previously, Cemat Power Dev Company (P). Ltd.)	Ghalemdi Khola	Myagdi	5000	2069.12.30	2076.11.05
94	Terhathum Power Company Pvt. Ltd.	Upper Khorunga	Terhathum	7500	2073.07.29	2076.11.17
95	Sagarmatha Jalabidhyut Company Pvt. Ltd.	Super Mai 'A'	Illam	9600	2074.11.14	2077.02.32
96	Mai Khola Hydropower Pvt. Ltd.	Super Mai Cascade	Illam	3800	2074.12.07	2077.03.31
97	Century Energy Pvt. Ltd.	Hadi Khola Sunkoshi A	Sindhupalchowk	997	2074.05.05	2077.05.12
98	Rawa Energy Development Pvt. Ltd.	Upper Rawa	Khotang	3000	2073.04.24	2077.06.04
99	Himalayan Hydropower Pvt. Ltd.	Namarjun Madi	Kaski	11880	2066.05.30	2077.06.12
101	Manakamana Engineering Hydropower Pvt. Ltd.	Ghatte Khola	Dolakha	5000	2070.04.28	2077.07.23
103	Civil Hydropower Pvt. Ltd.	Bijayapur 2 Khola Small	Kaski	4500	2072.09.12	2077.11.18
105	Taksar-Pikhuwa Hydropower Pvt. Ltd.	Taksar Pikhuwa	Bhojpur	8000	2073.09.01	2078.01.01
106	Shiva Shree Hydropower (P.) Ltd.	Upper Chaku A	Sindhupalchowk	22200	2067.05.22	2078.02.01
107	Mountain Energy Nepal Ltd.(Previously Robust Energy Pvt. Ltd.)	Mistri Khola	Myagdi	42000	2067.10.20	2078.03.03
108	Singati Hydro Energy Pvt. Ltd.	Singati Khola	Dolakha	25000	2070.07.27	2078.04.17
109	Richet Jalbidhyut Company Pvt. Ltd.	Richet Khola	Gorkha	4980	2073.02.23	2078.04.28
112	Samling Power Company Pvt. Ltd.	Mai Beni	Illam	9510	2073.07.26	2078.06.01
113	Modi Energy Ltd. (Prv. Manang Trade Link Pvt. Ltd.)	Lower Modi	Parbat	20000	2068.05.20	2078.06.14
115	Asian Hydropower Pvt. Ltd.	Lower Jogmai	Illam	6200	2074.12.07	2078.07.15
116	Green Ventures Pvt. Ltd.	Likhu-IV	Ramechhap	52400	2067.10.19	2078.07.21
117	Chhyangdi Hydropower Limited	Upper Chhyangdi Khola	Lamjung	4000	2074.03.22	2078.08.24
118	Universal Power Company Ltd.	Lower Khare	Dolakha	11000	2069.10.22	2078.09.06
119	Three Star Hydropower Company Ltd.	Sapsup Khola	Khotang	6600	2075.03.25	2078.09.23
121	Numbur Himalaya Hydropower Pvt. Ltd.	Likhu Khola A	Solukhumbu/ Ramechap	29040	2071.11.22	2078.10.25
123	Upper Solu Hydroelectric Company Pvt. Ltd	Solu Khola	Solukhumbu	23500	2070.07.24	2078.11.08
124	Upper Syange Hydropower P. Ltd.	Upper Syange Khola	Lamjung	2400	2072.06.14	2078.11.15
126	Buddha Bhumi Nepal Hydro Power Co. Pvt. Ltd.	Lower Tadi	Nuwakot	4993	2070.12.10	2078.12.10
127	Arun Valley Hydropower Development Company Ltd.	Kabeli B-1 Cascade	Panchthar	9940	2075.08.09	2078.12.12
128	Upper Hewa Khola Hydropower Co. Pvt. Ltd.	Upper Hewa Khola Small	Sankhuwasabha	8500	2072.09.23	2078.12.19
129	Makar Jitumaya Suri Hydropower Ltd. (Prv. Suri Khola Hydropower Pvt. Ltd.)	Suri Khola	Dolakha	6400	2072.02.20	2079.01.18
130	Nyadi Hydropower Limited	Nyadi	Lamjung	30000	2072.02.12	2079.01.27
131	Himalaya Urja Bikas Co. Pvt. Ltd.	Upper Khimti	Ramechhap	12000	2067.10.09	2079.02.04
132	Himalaya Urja Bikas Co. Ltd.	Upper Khimti II	Ramechhap	7000	2069.12.09	2079.02.17
135	Himalayan Power Partner Pvt. Ltd.	Dordi Khola	Lamjung	27000	2069.03.01	2079.06.14
136	Dordi Khola Jal Bidyut Company Ltd.	Dordi-1 Khola	Lamjung	12000	2071.07.19	2079.06.14
137	Aashutosh Energy Pvt. Ltd.	Chepe Khola Small	Lamjung	8630	2075.02.15	2079.06.16
138	Saidi Power Co. (Pvt.) Ltd.	Saiti Khola	Kaski	999	2077.06.13	2079.07.01

140	Swet-Ganga Hydropower and Construction Ltd.	Lower Likhu	Ramechhap	28100	2073.09.14	2079.07.19
141	Balephi Hydropower Limited (Prv. Huaning Development Pvt. Ltd.)	Upper Balephi A	Sindhupalchowk	36000	2072.08.29	2079.08.06
142	People's Power Limited	Puwa - 2	Illam	4960	2074.05.05	2079.08.12
143	Liberty Hydropower Pvt. Ltd.	Upper Dordi A	Lamjung	25000	2069.06.02	2079.08.17
144	Middle Modi Hydropower Ltd.	Middle Modi	Parbat	18000	2069.08.21	2079.09.07
145	Mid Solu Hydropower Company Pvt. Ltd.	Mid Solu Khola	Solukhumbu	9500	2075.04.21	2079.09.15
146	Kalanga Hydro Pvt. Ltd.	Kalangagad	Bajhang	15330	2072.03.15	2079.10.27
147	Sanigad Hydro Pvt. Ltd.	Upper Kalangagad	Bajhang	38460	2072.03.15	2079.11.06
148	Hydro Venture Private Limited	Solu Khola (Dudhkoshi)	Solukhumbu	86000	2071.11.13	2079.11.17
149	Bikash Hydropower Company Pvt. Ltd.	Upper Machha Khola Small	Gorkha	4550	2075.07.11	2079.11.17
150	Menchhiyam Hydropower Pvt. Ltd.	Upper Piluwa Khola 2	Sankhuwasabha	4720	2072.05.11	2079.11.22
151	Makari Gad Hydropower Pvt. Ltd.	Makarigad	Darchula	10000	2072.08.29	2079.11.27
152	Super Madi Hydropower Ltd. (Previously Himal Hydro and General Construction Ltd.)	Super Madi	Kaski	44000	2073.10.27	2079.12.27
153	Rapti Hydro and General Construction Pvt. Ltd.	Rukumgad	Rukum	5000	2073.03.07	2079.12.28
157	Peoples' Hydropower Company Pvt. Ltd.	Super Dordi 'Kha'	Lamjung	54000	2071.11.13	2080.02.08
158	Beni Hydropower Project Pvt. Ltd.	Upper Solu	Solukhumbu	19800	2069.09.16	2080.03.01
159	Maya Khola Hydropower Co. Pvt. Ltd.	Maya Khola	Sankhuwasabha	14900	2070.08.30	2080.03.22
160	Gaughar Ujjyalo Sana Hydropower Co. Pvt. Ltd.	Ghatte Khola Small	Sindhupalchowk	970	2074.11.11	2080.04.13
161	Global Hydropower Associate Pvt. Ltd.	Likhu-2	Solukhumbu/ Ramechap	52465	2071.11.19	2080.04.15
162	River Falls Hydropower Development Pvt. Ltd.	Down Piluwa	Sankhuwasabha	10300	2071.10.18	2080.04.25
163	Api Power Company Ltd.	Upper Chameliya	Darchula	40000	2075.11.15	2080.04.28
164	Bungal Hydro Pvt. Ltd. (Previously Sanigad Hydro Pvt. Ltd.)	Upper Sanigad	Bajhang	10700	2072.03.15	2080.05.02
165	Myagdi Hydropower Pvt. Ltd.	Ghar Khola	Myagdi	14000	2073.02.11	2080.05.08
167	Gelun Hydropower Co.Pvt.Ltd	Gelun	Sindhupalchowk	3200	2068.09.25	2080.08.15
168	Makar Jitumaya Hydropower Pvt. Ltd.	Upper Suri	Dolakha	7000	2075.04.10	2080.08.21
170	Ridge Line Energy Pvt. Ltd.	Super Chepe	Gorkha Lamjung	9050	2075.12.19	2080.10.08
172	Mathillo Mailung Khola Jalbidhyut Ltd. (Prv. Molnia Power Ltd.)	Upper Mailun	Rasuwa	14300	2068.05.23	2080.10.28
173	Yambling Hydropower Pvt. Ltd.	Yambling Khola	Sindhupalchowk	7270	2072.09.29	2080.11.08
174	Paan Himalaya Energy Private Limited	Likhu-1	Solukhumbu/ Ramechap	77000	2071.11.19	2080.12.19
175	Nilgiri Khola Hydropower Co. Ltd.	Nilgiri Khola-2 Cascade	Myagdi	71000	2074.03.05	2080.12.24
176	Ingwa Hydro Power Pvt. Ltd	Upper Ingwa khola	Taplejung	9700	2068.03.10	2080.12.28
177	Bhujung Hydropower Pvt. Ltd.	Upper Midim	Lamjung	7500	2074.05.29	2081.01.06
178	Unitech Hydropower Co. Pvt. Ltd.	Upper Phawa	Taplejung	5800	2074.11.11	2081.01.08
179	Sanima Middle Tamor Hydropower Ltd. (Prv. Tamor Sanima Energy Pvt. Ltd.)	Middle Tamor	Taplejung	73000	2073.09.26	2081.01.23
180	Chirkhwa Hydropower Pvt. Ltd.	Upper Chirkhwa	Bhojpur	4700	2073.03.01	2081.02.20
181	Parbat Paiyun Khola Hydropower Company Pvt. Ltd.	Seti Khola	Parbat	3500	2074.02.22	2081.03.07
182	Champawati Hydropower Pvt. Ltd	Chepe khola A	Lamjung	7000	2075.11.07	2081.03.25
183	Mount Everest Power Development Pvt. Ltd.	Dudhkunda Khola	Solukhumbu	12000	2075.04.01	2081.04.16
184	Nilgiri Khola Hydropower Co. Ltd.	Nilgiri Khola	Myagdi	38000	2073.11.30	2081.04.21
185	Rising Hydropower Compnay Ltd.	Selang Khola	Sindhupalchowk	990	2069.03.31	2081.05.01
186	Upper Richet Hydropower Pvt. Ltd.	Upper Richet	Gorkha	2000	2074.09.20	2081.05.27
187	Vision Lumbini Ltd.	Seti Nadi	Kaski	25000	2075.08.06	2081.07.27
189	Snow Rivers Pvt. Ltd.	Super Kabeli A	Taplejung	13500	2075.11.02	2081.09.05
191	Sabha Pokhari Hydro Power (P.) Ltd.	Lankhuwa Khola	Sankhuwasabha	5000	2074.02.21	2081.10.24

192	Salasungi Power Limited	Sanjen Khola	Rasuwa	78000	2072.12.02	2081.10.29
193	Shikhar Power Development Pvt. Ltd.	Bhim Khola	Baglung	4960	2075.06.10	2081.11.25
194	Hilton Hydro Energy Pvt. Ltd.	Super Kabeli	Taplejung	12000	2075.11.02	2081.12.02
197	Super Hewa Power Company Pvt. Ltd.	Super Hewa	Sankhuwasabha	6000	2074.12.27	2082.01.01
199	Upper Lohore Khola Hydropower Co. Pvt. Ltd.	Upper Lohore	Dailekh	4000	2074.12.08	2082.01.04
200	Idi Hydropower Co. P. Ltd.	Idi Khola	Kaski	975	2070.09.01	2082.01.08
201	Jhyamolongma Hydropower Development Company Pvt. Ltd.	Karuwa Seti	Kaski	32000	2074.04.20	2082.01.19
203	Sanvi Energy Pvt. Ltd.	Jogmai Cascade	Illam	5200	2075.05.07	2082.03.11
204	Him Consult Pvt. Ltd.	Rele Khola	Myagdi	6000	2074.01.28	2082.03.23
			SUB-TOTAL	**2160352**		
SOLAR (IPPs)						
1	Kathmandu Upatyaka Khanepani bewasthapan Board	Solar	Lalitpur	680.4	2069.06.12	2069.07.15
78	Surya Power Company Pvt. Ltd.	Bishnu Priya Solar Farm Project	Nawalparasi	960	2074.04.08	2075.08.13
100	Ridi Hydropower Development Co. Ltd.	Butwal Solar Project	Rupandehi	8500	2075.06.09	2077.07.15
104	Eco Power Development Company Pvt. Ltd	Mithila Solar PV Electric Project	Dhanusha	10000	2075.09.16	2077.11.22
111	Api Power Company Ltd.	Chandranigahpur Solar Project	Rautahat	4000	2075.04.27	2078.05.06
114	Solar Farm Pvt. Ltd.	Belchautara Solar Project	Tanahun	5000	2075.04.23	2078.07.01
120	Api Power Company Ltd.	Dhalkebar Solar Project	Dhanusha	1000	2075.05.03	2078.10.02
125	Sagarmatha Energy and Construction Pvt. Ltd.	Dhalkebar Solar Project	Dhanusha	3000	2075.06.24	2078.11.21
133	Api Power Company Ltd.	Simara Solar Project	Bara	1000	2075.05.03	2079.04.08
134	National Solar Power Co. Pvt. Ltd.	Grid Connected Solar PV Project (VGF)	Nawalparasi	5000	2076.11.23	2079.05.27
139	Nepal Solar Farm Pvt. Ltd.	Som RadhaKrishna Solar Farm Project (VGF)	Kaski	4000	2076.11.23	2079.07.14
154	G.I. Solar Pvt. Ltd.	Grid Connected Solar Project, Morang	Morang	6800	2078.08.27	2079.12.30
155	Saurya Bidhyut Power Pvt. Ltd.	Grid Connected Solar Project, Nawalparasi	Nawalparasi	2000	2077.12.20	2080.01.02
156	Pure Energy Pvt. Ltd.	Solar PV Project (1033), Nainapur, Banke, Block-2	Banke	10000	2078.08.12	2080.01.18
169	Pure Energy Pvt. Ltd.	Solar PV Project (1032), Nainapur, Banke, Block-1	Banke	10000	2078.08.12	2080.09.11
171	Jhapa Energy Limited	Saurya Bidyut Project, Shivasakti	Jhapa	10000	2078.08.12	2080.10.10
195	Tarai Solar Pvt. Ltd.	Jeera Bhawani Sedhwa Solar	Parsa	7700	2080.07.15	2081.12.13
196	Tarai Energy Pvt. Ltd.	DDB Solar	Parsa	2300	2080.07.15	2081.12.13
198	Pashupati Renewables Pvt. Ltd.	Dharamnagar Solar Farm	Kapilvastu	10000	2080.08.10	2082.01.04
202	Pashupati Renewables Pvt. Ltd.	Dharamnagar Solar Farm-II	Kapilvastu	15000	2080.08.10	2082.02.28
			SUB-TOTAL	**116940.4**		
BAGASSE (IPPs)						
1	Indushankar Chini Udhyog Ltd.	Indushankar Chini Udhyog Ltd.	Sarlahi	3000	2075.06.10	2078.11.01
2	Everest Sugar and Chemical Industries Ltd.	Everest Sugar and Chemical Industries Ltd.	Mahottari	3000	2075.06.17	2077.10.26
			SUB-TOTAL	**6000**		
			TOTAL	**2929692.4**		

NEPAL ELECTRICITY AUTHORITY
POWER TRADE DEPARTMENT
Status of IPPs and NEA's Subsidiary Companies owned Power Projects (Under Construction) as of FY 2081/82
(Financial Closure concluded projects)

S.N.	Developers	Projects	Location	Installed Capacity (kW)	PPA Date
Hydropower Projects (NEA's Subsidiary Companies)					
1	Middle Bhotekoshi Jalbidhyut Company Ltd.	Middle Bhotekoshi	Sindhupalchowk	102000	2068.07.28
2	Trishuli Jal Vidhyut Company Ltd.	Upper Trishuli 3B	Rasuwa	37000	2074.05.06
3	Tanahun Hydropower Ltd.	Tanahun	Tanahun	140000	2075.03.15
4	Raghuganga Hydropower Ltd.	Rahughat	Myagdi	40000	2075.12.18
5	Tamakoshi Jalvidyut Company Ltd.	Tamakoshi-V	Dolakha	94800	2079.08.14
6	Modi Jalvidhyut Company Ltd.	Upper Modi 'A'	Kaski	42000	2080.03.11
7	Modi Jalvidhyut Company Ltd.	Upper Modi	Kaski	18200	2080.10.18
			SUB-TOTAL	**474000**	
Hydropower Projects (IPPs)					
1	Nama Buddha Hydropower Pvt. Ltd.	Tinau Khola Small	Palpa	1665	2065.03.31
2	Jumdi Hydropower Pvt. Ltd.	Jumdi Khola	Gulmi	1750	2066.10.21
3	Hira Ratna Hydropower P.ltd	Tadi Khola	Nuwakot	5000	2067.01.09
4	Energy Engineering Pvt. Ltd.	Upper Mailung A	Rasuwa	6420	2067.03.25
5	Greenlife Energy Pvt. Ltd.	Khani khola-1	Dolakha	40000	2067.06.24
6	Water and Energy Nepal Pvt. Ltd.	Badi Gad	Baglung	6600	2068.08.13
7	Dariyal Small Hydropower Pvt.Ltd	Upper Belkhu	Dhading	996	2068.11.28
8	Suryakunda Hydroelectric Pvt. Ltd.	Upper Tadi	Nuwakot	11000	2068.12.03
9	Sasha Engingeering Hydropower (P). Ltd	Khani Khola(Dolakha)	Dolakha	30000	2069.03.25
10	Lower Irkhuwa Hydropower Co. Pvt. Ltd.	Lower Irkhuwa	Bhojpur	13040	2075.02.16
11	Hydro Innovation Pvt. Ltd.	Tinekhu Khola	Dolakha	990	2069.06.08
12	Salankhu Khola Hydropower Pvt. Ltd.	Salankhu Khola	Nuwakot	2500	2069.06.14
13	Moonlight Hydropower Pvt. Ltd.	Balephi A	Sindhupalchowk	22140	2069.07.14
14	Reliable Hydropower Co. Pvt. Ltd.	Khorunga Khola	Terhathum	4800	2069.08.26
15	Rara Hydropower Development Co. Pvt. Ltd.	Upper Parajuli Khola	Dailekh	2150	2069.08.28
16	Lohore Khola Hydropower Co. Pvt. Ltd.	Lohore Khola	Dailekh	4200	2069.09.08
17	Dudhkoshi Power Company Pvt. Ltd.	Rawa Khola	Khotang	6500	2069.09.26
18	Madhya Midim Jalbidhyut Company P. Ltd.	Middle Midim	Lamjung	4800	2069.10.23
19	Volcano Hydropower Pvt. Ltd.	Teliya Khola	Dhankuta	996	2069.10.25
20	Betrawoti Hydropower Company (P).Ltd	Phalankhu Khola	Rasuwa	13700	2069.12.06
21	Dovan Hydropower Company Pvt. Ltd.	Junbesi Khola	Solukhumbu	5200	2069.12.29
22	Tallo Midim Jalbidhut Company Pvt. Ltd.	Lower Midim	Lamjung	996	2070.01.19
23	Tangchhar Hydro Pvt. Ltd	Tangchhahara	Mustang	2200	2070.02.20
24	Abiral Hydropower Co. Pvt. Ltd.	Upper Khadam	Morang	990	2070.02.21
25	Essel-Clean Solu Hydropower Pvt. Ltd.	Lower Solu	Solukhumbu	82000	2070.07.15
26	Consortium Power Developers Pvt. Ltd.	Khare Khola	Dolakha	24100	2070.07.15

27	Dipsabha Hydropower Pvt. Ltd.	Sabha Khola A	Sankhuwasabha	9990	2071.12.02
28	Research and Development Group Pvt. Ltd.	Rupse Khola	Myagdi	4000	2071.12.17
29	Hydro Empire Pvt. Ltd.	Upper Myagdi	Myagdi	37000	2071.12.17
30	Chandeshwori Mahadev Khola MH. Co. Pvt. Ltd.	Chulepu Khola	Ramechhap	8520	2071.12.23
31	Dhaulagiri Kalika Hydro Pvt. Ltd.	Darbang-Myagdi	Myagdi	25000	2072.04.28
32	Kabeli Energy Limited	Kabeli-A	Panchthar and Taplejung	37600	2072.06.07
33	Peoples Energy Ltd. (Previously Peoples Hydro Co-operative Ltd.)	Khimti-2	Dolakha and Ramechhap	48800	2072.06.14
34	Chauri Hydropower (P.) Ltd.	Chauri Khola	Kavrepalanchowk, Ramechhap, Sindhupalchowk, Dolakha	6000	2072.06.14
35	Multi Energy Development Pvt. Ltd.	Langtang Khola	Rasuwa	20000	2072.09.29
36	Ankhu Hydropower (P.) Ltd.	Ankhu Khola	Dhading	34000	2073.01.30
37	Siddhi Hydropower Company Pvt. Ltd.	Siddhi Khola	Illam	10000	2074.05.29
38	Siuri Nyadi Power Pvt. Ltd.	Super Nyadi	Lamjung	40270	2074.02.19
39	Sano Milti Khola Hydropower Ltd.	Sano Milti	Ramechhap and Dolakha	3000	2073.01.13
40	Diamond Hydropower Pvt. Ltd.	Upper Daraudi-1	Gorkha	10000	2072.08.14
41	Rasuwa Hydropower Pvt. Ltd	Phalanku Khola	Rasuwa	7290	2071.08.24
42	Mount Nilgiri Hydropower Company Pvt. Ltd.	Rurubanchu-1	Kalikot	13500	2074.05.08
43	Sindhujwala Hydropower Ltd.	Upper Nyasem	Sindhupalchowk	41400	2073.07.24
44	Energy Venture Pvt. Ltd.	Upper Lapche	Dolakha	52000	2073.04.20
45	Orbit Energy Ltd. (Previously Pokhari Hydropower Company Pvt. Ltd.)	Sabha Khola B	Sankhuwasabha	21500	2074.03.26
46	Daram Khola Hydro Energy Ltd.	Daram Khola	Baglung and Gulmi	9600	2073.10.09
47	Him River Power Pvt. Ltd.	Liping Khola	Sindhupalchowk	16260	2073.02.28
48	Madhya Tara Khola Hydropower P. Ltd. (Prv. Pahadi Hydro Power Company (P.) Ltd.)	Madhya Tara Khola Small	Baglung	2200	2073.10.26
49	Nepal Water and Energy Development Company Pvt. Ltd.	Upper Trishuli - 1	Rasuwa	216000	2074.10.14
50	Mewa Developers Pvt. Ltd.	Middle Mewa	Taplejung	73500	2075.05.04
51	Him Star Urja Co. Pvt. Ltd.	Buku Kapati	Okhaldhunga and Solukhumbu	5000	2074.10.11
52	Nasa Hydropower Pvt. Ltd.	Lapche Khola	Dolakha	160000	2074.07.29
53	Vision Energy and Power Pvt. Ltd.	Nupche Likhu	Ramechhap	57500	2074.11.28
54	Tundi Power Pvt.Ltd	Rahughat Mangale	Myagdi	35500	2075.03.29
55	Gaurishankar Power Development Pvt. Ltd.	Middle Hyongu Khola B	Solukhumbu	22900	2074.12.08
56	Omega Energy Developer Pvt. Ltd.	Sunigad	Bajhang	11050	2074.11.30
57	Gorakshya Hydropower Pvt. Ltd.	Super Ankhu Khola	Dhading	23500	2074.03.15
58	K.B.N.R. Isuwa Power Limited (Prv. Dolakha Nirman Company Pvt. Ltd.)	Isuwa Khola	Sankhuwasabha	97200	2075.06.26
59	Kasuwa Khola Hydropower Ltd.	Kasuwa Khola	Sankhuwasabha	45000	2075.08.13
60	Apex Makalu Hydro Power Pvt. Ltd.	Middle Hongu Khola A	Solukhumbu	22000	2075.05.14
61	Tundi Power Pvt.Ltd	Upper Rahughat	Myagdi	48500	2075.03.29
62	Blue Energy Pvt. Ltd.	Super Trishuli	Gorkha and Chitwan	100000	2075.07.11
63	Mabilung Energy (P.) Ltd	Upper Piluwa Khola -3	Sankhuwasabha	4950	2075.12.12

64	Samyukta Urja Pvt. Ltd. (Prv. Sungava Foundation Pvt. Ltd.)	Thulo Khola	Myagdi	21300	2075.02.17
65	Shaileshwari Power Nepal Pvt. Ltd.	Upper Gaddigad	Doti	1550	2075.04.06
66	Mount Rasuwa Hydropower Pvt. Ltd.	Midim 1 Khola	Lamjung	13424	2075.10.07
67	Sewa Hydro Ltd.	Lower Selang	Sindhupalchowk	1500	2074.02.22
68	Himalayan Water Resources and Energy Development Co. Pvt. Ltd.	Upper Chauri	Kavrepalanchowk	6000	2074.07.27
69	Dhading Ankhu Khola Hydro Pvt. Ltd.	Upper Ankhu	Dhading	44000	2075.06.14
70	Isuwa Energy Pvt. Ltd.	Lower Isuwa Cascade	Sankhuwasabha	40100	2077.09.27
71	White Lotus Power Pvt. Ltd. (Prv. North Summit Hydro Pvt.Ltd.)	Hidi Khola	Lamjung	6820	2075.10.04
72	Electro Power Company Ltd. (Prv. Sailung Power Company Pvt. Ltd.)	Bhotekoshi-1	Sindhupalchowk	44000	2075.03.15
73	Orbit Energy Pvt. Ltd.	Sabha Khola C	Sankhuwasabha	6290	2075.12.10
74	River Side Hydro Energy Pvt. Ltd.	Tamor Khola-5	Taplejung	37520	2075.12.04
75	Palun Khola Hydropower Pvt. Ltd.	Palun Khola	Taplejung	21000	2075.04.06
76	Perfect Energy Development Pvt. Ltd	Middle Trishuli Ganga	Nuwakot	15625	2075.09.03
77	Silk Power (Prv. Maa Shakti Engineering & hydropower Pvt. Ltd.)	Luja Khola	Solukhumbu	24824	2075.10.16
78	LC Energy Pvt. Ltd. (Prv. Chirkhwa Hydropower Pvt. Ltd.)	Lower Chirkhwa	Bhojpur	4060	2074.01.20
79	Apolo Hydropower Pvt. Ltd.	Buku Khola	Solukhumbu	6000	2070.02.02
80	Barpak Daruadi Hydropower Pvt. Ltd.	Middle Super Daraudi	Gorkha	10000	2075.11.23
81	Hydro Village Pvt. Ltd.	Myagdi Khola	Myagdi	57300	2075.06.04
82	Milke Jaljale Hydropower Pvt.Ltd.	Upper Piluwa Hills	Sankhuwasabha	4990	2075.12.04
83	Arati Power Company Ltd.	Upper Irkhuwa	Bhojpur	14500	2075.04.01
84	Union Mewa Hydro Ltd.	Mewa Khola	Taplejung	23000	2075.10.04
85	Sajha Power Development Pvt. Ltd.	Lower Balephi	Sindhupalchowk	20000	2075.10.06
86	Mewa Developers Pvt. Ltd	Siwa Khola	Taplejung	9300	2079.05.20
87	Brahamayani Hydropower Pvt. Ltd. (Prv. Ekikrit Byapar Company Pvt. Ltd.)	Brahamayani	Sindhupalchowk	35470	2075.08.24
88	Dudhpokhari Chepe Hydropower Ltd.	Dudhpokhari Chepe	Gorkha	11000	2075.10.15
89	Kabeli Hydropower Company Pvt.Ltd.	Kabeli-3	Taplejung	21930	2075.10.03
90	White Gold Multi Energy Pvt. Ltd. (Prv. Dhaulagiri Civil Electrical and Mechanical Engineering Pvt. Ltd.)	Madhya Daram Khola A	Baglung	3000	2075.12.26
91	Milestone Hydropower Pvt. Ltd. (Prv. Dhaulagiri Civil Electrical and Mechanical Engineering Pvt. Ltd.)	Madhya Daram Khola B	Baglung	4500	2075.12.26
92	Ambe Hydropower Pvt. Ltd.	Upper Bhurundi	Parbat	3750	2075.12.10
93	Integrated Hydro Fund Nepal Pvt. Ltd.	Upper Brahamayani	Sindhupalchowk	15150	2075.08.24
94	Alliance Energy Solutions Pvt.Ltd.	Upper Sit Khola	Argakhanchi	905	2075.08.23
95	United Mewa Khola Hydropower Pvt. Ltd.	Mewa Khola	Taplejung	50000	2074.02.21
96	IDS Energy Pvt. Ltd.	Lower Khorunga	Terhathum	5500	2074.08.24
97	Seti Khola Hydropower Pvt. Ltd.	Seti Khola	Kaski	22000	2074.11.11
98	National hydro Power Co. Ltd.	Tallo Indrawati	Sindhupalchowk	4153	2079.11.25
99	Himali Hydro Fund Pvt. Ltd.	Sona Khola	Taplejung	9000	2075.03.14
100	Upper Seti Hydro Pvt. Ltd.	Upper Seti	Kaski	20000	2080.06.10

101	Langtang Bhotekoshi Hydropower Company Pvt. Ltd.	Rasuwa Bhotekoshi	Rasuwa	120000	2074.09.07
102	Kalika Construction Pvt. Ltd.	Upper Daraudi B	Gorkha	8300	2076.01.09
103	Kalika Construction Pvt. Ltd.	Upper Daraudi C	Gorkha	9820	2076.01.09
104	Peace Energy Company Pvt. Ltd.	Upper Kabeli	Taplejung	28100	2080.04.02
105	Jagadulla Hydropower Co. Ltd.	Jagadulla	Dolpa	106000	2080.01.27
106	Super Bagmati Hydropower Pvt. Ltd.	Super Tallo Bagmati	Lalitpur	41314	2080.03.25
107	Tamor Sanima Energy Pvt. Ltd.	Upper Tamor	Taplejung	255281	2079.07.17
108	Hydro Support Pvt. Ltd.	Middle Kaligandaki	Myagdi	66300	2080.03.06
109	Jalshakti Hydro Company Pvt. Ltd.	Ilep (Tatopani)	Dhading	23675	2075.03.25
110	Sita Hydropower Co. Pvt. Ltd.	Dudh Khola	Manang	65000	2075.07.11
111	Gumu Khola Bhyakure Hydropower Pvt. Ltd.	Gumu Khola	Dolakha	950	2075.08.21
112	Upper Balephi Hydropower Ltd.	Mathilllo Balephi	Sindhupalchowk	46000	2080.08.05
113	Manang Marsyangdi Hydropower Company Pvt. Ltd.	Manang Marsyangdi	Manang	135000	2077.12.09
114	Annapurna Power Company Pvt. Ltd.	Upper Madi-0	Kaski	43000	2080.05.06
115	Gurans Hydro Pvt. Ltd	Sankhuwa Khola	Sankhuwasabha	41060	2080.11.08
116	Mona Hydropower Ltd.	Bagar Khola	Myagdi	5500	2080.08.15
117	Him Parbat Hydropower Pvt. Ltd.	Sagu Khola-1	Dolakha	5500	2075.04.10
118	Him Parbat Hydropower Pvt. Ltd.	Sagu Khola	Dolakha	20000	2075.04.10
119	Lalupate Hydropower Company Pvt. Ltd.	Dana Khola	Manang	49950	2080.08.05
120	Remit Hydro Ltd.	Ghunsa Khola	Taplejung	77500	2081.01.21
121	Gurkhas Himalayan Hydro Ltd.	Upper Junbesi	Solukhumbu	5875	2080.03.22
122	Lower Mid Rawa Khola Hydropower Project Pvt. Ltd.	Lower Mid Rawa	Khotang	4000	2080.01.28
123	Madame Khola Hydropower Pvt. Ltd.	Madame Khola	Kaski	24000	2075.04.15
124	Upper Marshyangdi Hydropower Company Pvt. Ltd.	Upper Marsyangdi -1	Lamjung	102000	2081.09.09
125	Happy Energy Pvt. Ltd.	Mathilllo Sankhuwa	Sankhuwasabha	40000	2080.03.25
126	ABP Energy Pvt. Ltd	Tadi Ghyamphedi	Nuwakot	8000	2081.05.17
127	Dynamic Hydro Energy Pvt. Ltd.	Lapche Tamakoshi	Dolakha	42000	2079.10.04
128	Darchula Power Pvt. Ltd.	Madhya Chameliya	Darchula	28304	2080.06.29
129	Surya Holding Pvt. Ltd.	Upper Mewa Khola 'A'	Taplejung	31920	2080.05.21
130	Puwa Khola-1 Hydropower Pvt. Ltd.	Aayu Malun khola	Okhaldhunga	21000	2078.11.01
			SUB-TOTAL	**3770073**	
SOLAR (IPPs)					
1	Gorkha Congenial Energy and Investment Pvt. Ltd.	Lamahi Solar	Dang	3000	2075.06.24
2	Global Energy and Construction Pvt. Ltd.	Duhabi Solar	Sunsari	8000	2075.06.25
3	Api Power Company Ltd.	Parwanipur Solar	Parsa	8000	2075.04.27
4	Prime Power Pvt. Ltd	Kapilvastu Solar	Kapilvastu	30000	2081.01.10
5	Arga Bhagbati Ventures Pvt. Ltd.	Arga Solar	Argakhanchi	10000	2080.08.10
			SUB-TOTAL	**59000**	
			TOTAL	**4303073**	

NEPAL ELECTRICITY AUTHORITY
POWER TRADE DEPARTMENT
Status of IPPs and NEA's Subsidiary Companies owned Power Projects (Different Stages of Development) as of FY 2081/82
(Without Financial Closure)

S.N.	Developers	Projects	Location	Installed Capacity (kW)	PPA Date
Hydropower Projects (IPPs)					
1	Balephi Jalbidhyut Co. Ltd.	Balephi	Sindhupalchowk	23520	2067.09.08
2	United Modi Hydropwer Ltd.	Lower Modi 2	Parbat	10500	2072.11.14
3	Sisa Hydro Electric Company Pvt. Ltd.	Sisa Khola A	Solukhumbu	2800	2073.10.28
4	Himali Rural Electric Co-operative Ltd.	Leguwa Khola Small	Dhankuta	640	2074.02.08
5	Nyam Nyam Hydropower Company Pvt. Ltd.	Nyam Nyam Khola	Rasuwa	6000	2074.03.27
6	Saptang Hydro Power Pvt. Ltd.	Saptang Khola	Nuwakot	2500	2074.04.08
7	Khechereswor Jal Vidhyut Pvt. Ltd.	Jadari Gad Small	Bajhang	1000	2074.10.12
8	Khechereswor Jal Vidhyut Pvt. Ltd.	Salubyani Gad Small	Bajhang	233	2074.10.12
9	Baraha Multipower Pvt. Ltd.	Irkhuwa Khola B	Bhojpur	15524	2075.02.14
10	Jhilimili Hydropower Co. Pvt. Ltd.	Gulangdi Khola	Gulmi	980	2075.02.24
11	North Summit Hydro Pvt. Ltd.	Nyadi Phidi	Lamjung	21400	2075.02.24
12	Annapurna Bidhyut Bikas Co. Pvt. Ltd.	Landruk Modi	Kaski	86590	2075.04.13
13	Thulo Khola Hydropower Pvt. Ltd.	Upper thulo Khola-A	Myagdi	22500	2075.04.24
14	Kalika Energy Ltd.	Bhotekoshi-5	Sindhupalchowk	46000	2075.04.25
15	Super Ghalemdi Hydropower Pvt. Ltd.	Super Ghalemdi	Myagdi	9140	2075.05.05
16	Dibyajyoti Hydropower Pvt. Ltd.	Marsyangdi Besi	Lamjung	50000	2075.05.10
17	Amar Jyoti Hydro Power Pvt. Ltd.	Istul Khola	Gorkha	1506	2075.05.13
18	Ichowk Hydropower Pvt. Ltd.	Gohare Khola	Sindhupalchowk	950	2075.05.25
19	Pike Hydropower Pvt. Ltd.	Likhu Khola	Ramechhap and Okhaldhunga	30000	2075.05.26
20	Sita Hydro Power Co. Pvt. Ltd.	Nyasim Khola	Sindhupalchowk	35000	2075.05.26
21	Sushmit Energy Pvt. Ltd.	Kunaban Khola	Myagdi	20000	2075.05.29
22	Masina Paryatan Sahakari Sanstha Ltd.	Masina	Kaski and Tanahu	891	2075.06.02
23	Phedi Khola Hydropower Company Pvt. Ltd.	Phedi Khola (Thumlung)	Bhojpur	4300	2075.06.21
24	Kalinchowk Hydropower Ltd.	Sangu (Sorun)	Dolakha	5000	2075.08.09
25	Ruru Hydroelectric Company Pvt. Ltd.	Rurubanchu Khola-2	Kalikot	12000	2075.08.20
26	Sindhujwala Hydropower Ltd.	Upper Nyasem Khola A	Sindhupalchowk	21000	2075.10.06
27	Habitat Power Company Ltd	Hewa Khola "A"	Panchthar	9400	2075.10.07
28	Ruby Valley Hydropower Company Ltd	Menchet Khola	Dhading	7000	2075.10.15
29	Sankhuwasabha Power Development Pvt. Ltd.	Super Sabha Khola	Sankhuwasabha	4100	2075.10.23
30	Jal Urja Pvt. Ltd.	Nuagad	Darchula	1000	2075.11.03
31	Helambu Construction Pvt. Ltd	Ksumti khola	Sindhupalchowk	683	2075.11.29
32	Hydro Connection Pvt. Ltd.	Rauje Khola	Solukhumbu	17712	2075.12.04
33	Bhalaudi Khola Hydropower Pvt. Ltd.	Bhalaudi Khola	Kaski	2645	2076.01.06
34	Super Khudi Hydropower Pvt. Ltd.	Upper Khudi	Lamjung	26000	2076.01.11

35	Syarpu Power Company Limited	Syarpu Khola	Rukum	3236	2078.04.11
36	Dudh koshi Hydropower Private Ltd	Dudhkoshi 2 - Jaleshwor	Solokhumbhu	70000	2078.08.06
37	Sani Bheri Hydropower Co. Pvt. Ltd	Sani Bheri 3	Rukum	46720	2078.08.06
38	Dipjyoti Hydropower Pvt. Ltd.	Khani Khola	Dolakha	550	2078.08.10
39	Melamchi Hydro Pvt.Ltd.	Ribal khola	Sindhupalchowk	998	2078.08.10
40	Bigu Hydro Venture Pvt. Ltd.	Pegu Khola	Dolakha	3000	2079.03.30
41	Halesi Urja Pvt. Ltd.	Madhya Rawa	Khotang	2200	2079.05.15
42	Maulakalika Hydropower Company Pvt. Ltd.	Kalika Kaligandaki	Tanahu	38160	2079.05.21
43	Jurimba Hydropower Co. Pvt. Ltd.	Jurimba Khola	Sindhupalchowk	7630	2079.05.27
44	S.K Energy Development Pvt. Ltd.	Shyam Khola	Bhojpur	7200	2079.07.17
45	Terhathum Power Company Ltd.	Khorunga-Tangmaya	Terhathum	2000	2079.07.17
46	Dynamic Power Pvt. Ltd.	Manahari Khola	Makwanpur	4444	2079.08.13
47	Water Energy Solution Pvt. Ltd.	Upper Deumai	Ilam	8300	2079.08.13
48	Dynamic Hydro Energy Pvt. Ltd.	Chepe Khola Cascade	Lamjung and Gorkha	2000	2079.10.04
49	White Flower Energy Company Pvt. Ltd.	Upper Chhujung	Sankhuwasabha	40700	2079.10.29
50	Simkosh Hydropower Pvt. Ltd.	Simkosh Khola	Myagdi	3450	2079.11.11
51	Summit Energy Solution Pvt. Ltd	Bakan Khola	Sankhuwasabha	44000	2079.11.11
52	Kali Gandaki Gorge Hydropower Co. Pvt. Ltd	Kaligandaki Gorge	Myagdi	180000	2079.11.17
53	Sangrila Urja Pvt. Ltd.	Chhujung Khola	Sankhuwasabha	63000	2079.12.17
54	Yaru Hydrpower Pvt. Ltd.	Yaru Khola	Gorkha	30542	2079.12.17
55	Water Energy Development Pvt. Ltd.	Machha Khola	Gorkha	16000	2080.03.04
56	Sanima Hydropower Ltd.	Jum Khola	Dolakha	55615	2080.03.06
57	Upper Syange Hydropower Limited	Dovan khola	Gorkha	24500	2080.03.07
58	Upper Myagdi Hydropower Pvt. Ltd. (Prv. Himalayan Infrastructure Fund Ltd.)	Upper Myagdi -1	Myagdi	53500	2080.03.11
59	Milarepa Energy Pvt. Ltd.	Super Melamchi khola	Sindhupalchowk	23600	2080.03.18
60	Budhi Gandaki Hydropower Pvt. Ltd.	Super Machha Khola Sana	Gorkha	4600	2080.03.21
61	Himalayan Engineering and Energy Pvt. Ltd.	Arun Khola-2	Nawalpur	2000	2080.03.21
62	Expert Hydro Investment Pvt. Ltd.	Sani Bheri	Rukum (East)	44520	2080.03.27
63	Om Power Company Pvt. Ltd.	Thuligad Khola	Doti and Kailali	17000	2080.04.09
64	Samriddhi Energy Ltd.	Bajhang Upper Seti	Bajhang	216000	2080.04.19
65	Himshila Power Company Ltd.	Gashali Khola	Dhading	4500	2080.04.24
66	Everest Energy & Infrastructure Fund Pvt. Ltd.	Mudi Khola	Myagdi	14700	2080.04.25
67	Menchhiyam Hydropower Pvt. Ltd.	Upper Piluwa Khola-1	Sankhuwasabha	7700	2080.04.29
68	Butwal Power Company Ltd.	Lower Manang Marsyangdi	Manang	139200	2080.04.30
69	Nar Khola Hydro Energy Pvt. Ltd.	Nar Khola	Manang	61110	2080.05.01
70	Balephi Energy Pvt. Ltd.	Balephi Khola	Sindhupalchowk	40000	2080.05.01
71	Liberty Energy Company Ltd.	Lodo Khola Small	Lamjung	1600	2080.05.18
72	Tiplyang Kaligandaki Hydropower Pvt. Ltd.	Tiplyang Kaligandaki	Myagdi	58000	2080.05.19
73	Ganesh Himal Hydropower Pvt. Ltd.	Ankhu Khola-2	Dhading	20000	2080.05.22
74	Nilganga Hydropower Company Pvt. Ltd.	Khimti-Ghwang Khola	Dolakha and Ramechhap	9000	2080.05.26
75	Nilganga Hydropower Company Pvt. Ltd.	Suti Khola	Manang	21000	2080.05.26
76	Shangrila Hydropower Pvt. Ltd.	Jaldigad	Rukum (West)	20731	2080.05.26

77	Gulmi Hydro Pvt. Ltd.	Lower Rupse	Myagdi	1860	2080.05.27
78	Koplang Energy Hydropower Pvt. Ltd.	Lower Khani B	Dolakha	6200	2080.06.07
79	Maa Durga Kali Hydropower Company Pvt. Ltd.	Miwaje Khola	Kaski	4950	2080.06.10
80	Niko Energy Ltd.	Upper Bhurundi 'A'	Kaski	9000	2080.06.15
81	Iceland Power Pvt. Ltd.	Garjang Khola	Ramechhap	900	2080.06.22
82	Hub Power Pvt. Ltd.	Lower Nyadi	Lamjung	12600	2080.06.22
83	Spark Hydroelectric Company Ltd.	Tamor Mewa	Taplejung	128000	2080.06.24
84	Matribhumi Hydropower Development Company Pvt. Ltd.	Sishuwa Khola	Sankhuwasabha	13500	2080.06.30
85	Sankhuwasabha Power Development Pvt. Ltd.	Super Sabha Khola A	Sankhuwasabha	9412	2080.06.30
86	M.A. Power Pvt. Ltd.	Marsyangdi Nadi	Tanahu and Gorkha	90000	2080.07.01
87	Trishuli Cascade Power Pvt. Ltd.	Upper Trishuli-1 Cascade	Rasuwa	24600	2080.07.19
88	Mandakini Hydropower Ltd.	Upper Sardi Khola	Kaski	2837	2080.08.13
89	Darkhola Hydropower Pvt. Ltd.	Dar Khola	Myagdi	6500	2080.08.15
90	Sumnima Hydropower Company Pvt. Ltd.	Upper Pikhuwa Khola	Bhojpur	4900	2080.08.17
91	Alliance Energy Solutions Pvt. Ltd.	Syalque Khola	Manang	4800	2080.08.17
92	Kanchan Urja Pvt. Ltd.	Gandigad Small	Baitadi	1000	2080.08.19
93	Shrestha Energy Solution Pvt. Ltd.	Upper Seti-1	Kaski	13000	2080.09.06
94	Devdhunga Malika Hydropower Company Pvt. Ltd.	Dev dhunga Chaku	Sindhupalchowk	3412	2080.09.06
95	Shikhar Power Development Ltd.	Lower Bhim Khola Cascade	Baglung	6050	2080.10.04
96	Crystal Power Development Pvt. Ltd.	Super Tamor	Taplejung	166000	2080.10.05
97	Bajra Energy Ventures Pvt. Ltd.	Bajra Madi	Kaski	24800	2080.10.28
98	Alampu Jalbidhyut Bikas Co. Pvt. Ltd.	Mathhilo Sagu	Dolakha	10000	2080.10.29
99	Bagmati Water Energy Pvt Ltd.	Malta Bagmati	Lalitpur	6500	2080.12.06
100	Naulo Nepal Hydro Electric Pvt. Ltd.	Budhigandaki "Ka"	Gorkha	103400	2081.01.03
101	Naulo Nepal Hydro Electric Pvt. Ltd.	Budhigandaki "Kha"	Gorkha	226000	2081.01.03
102	Dhaulashree Power Company Pvt. Ltd.	Dhaula Khola	Myagdi	10600	2081.02.11
103	Manakamana Daraudi Hydropower Company Ltd.	Daraudi Nadi	Gorkha	9840	2081.02.28
104	Harmony Initiatives Pvt. Ltd	Lapa Khola	Dhading	4720	2081.02.29
105	Vision Tesla Power Pvt. Ltd.	Induwa Khola	Sankhuwasabha	24921	2081.03.10
106	Times Energy Pvt. Ltd	Budi Gandaki	Gorkha	340423	2081.03.12
107	Karnali Jalashrot Limited	Syano Khola	Myagdi	4750	2081.05.12
108	Ana Multipurpose Company Pvt. Ltd.	Kisedi Khola	Lamjung	4100	2081.05.13
109	Trikal Power Company Pvt. Ltd	Thaligad	Darchula	2000	2081.05.17
110	Silk Power Pvt. Ltd	Luja Khola Cascade	Solukhumbu	9540	2081.05.19
111	Ghandruk Hydro Pvt. Ltd.	Chhomrung Khola	Kaski	4890	2081.05.28
112	Kang Hydropower Company Ltd.	Upper Maiwa	Taplejung	17850	2081.05.30
113	S.N. Energy Ltd.	Super Seti	Kaski	24000	2081.05.31
114	Ramjanaki Hydropower Pvt. Ltd.	Apsuwa Khola-1	Sankhuwasabha	22248	2081.06.06
115	Ramjanaki Hydropower Pvt. Ltd.	Mathhilo Apsuwa Khola	Sankhuwasabha	35150	2081.06.21
116	Panch Khapan Hydropower Pvt. Ltd.	Lower HewaKhola-A	Sankhuwasabha	6848	2081.06.23
117	S.C. Power Co. Pvt.Ltd.	Tila-1	Kalikot	298750	2081.07.07
118	S.C. Power Co. Pvt. Ltd.	Tila-2	Kalikot	296740	2081.07.07

119	Dupcheshwor Mahadev Hydro Co. Pvt. Ltd.	Middle Tadi	Nuwakot	5300	2081.08.05
120	Paropakar Bahu Udesiya Sahakari Sanstha Ltd.	Paropakar Sahakari Laghu	Gulmi	135	2081.09.07
121	Janasewa Water Turbine tatha Daramkhola Laghu Jalabidhyut Pariyojana Pvt. Ltd	Daram khola laghu ja.bi.aa.	Gulmi	85	2081.09.07
122	Bhojpur Shiwalaya Power Pvt. Ltd.	Super Irkhuwa	Bhojpur	4925	2081.11.18
123	Himalayan Energy Pvt. Ltd.	Kalinchowk Sana	Dolakha	3000	2081.11.19
124	Sumnima Hydropower Company Pvt. Ltd.	Pikhuwa Pashupati	Bhojpur	4100	2081.11.26
125	Halesi Hydropower Pvt. Ltd.	Rawa Khola	Khotang	5400	2081.12.10
126	Chino Hydropower Ltd.	Chino Khola	Manang	7832	2082.01.14
127	Seti Khola Hydropower Ltd.	Seti Khola Cascade	Kaski and Tanahu	9800	2082.01.17
128	Waleng Tumhok Hydropower Pvt. Ltd.	Upper Maya Khola	Sankhuwasabha	5000	2082.01.19
129	Magic Arun Hydropower Pvt. Ltd.	Isuwa PROR Cascade-3	Sankhuwasabha	9950	2082.02.29
130	Aspire Power Company Pvt. Ltd	Pikhuwa Khola (Khawa)	Bhojpur	6740	2082.02.29
131	Bagthala Hydro Pvt. Ltd	Lower Kalangagad	Bajhang	8000	2082.03.06
132	Bista Energy House Pvt. Ltd	Isuwa PROR Cascade-2	Sankhuwasabha	9950	2082.03.13
133	Tallosera Hydro Ltd.	Sanibheri Uttarganga Micro Hydro	Rukum East	998	2082.03.15
134	Chitwan Energy Limited	Lower Thulo Khola	Myagdi	4750	2082.03.16
135	Green Gorkha Energy Ltd.	Upper Daraudi	Gorkha	9200	2082.03.17
			SUB-TOTAL	4004276	
SOLAR (IPPs)					
1	First Solar Developers Nepal Pvt. Ltd.	Bhrikuti Grid-tied Solar Project	Kapilvastu	8000	2077.12.20
2	G.C. Solar Energy Group Pvt. Ltd.	Grid Connected Solar Electricity Project, Birendranagar, Surkhet	Surkhet	1200	2078.09.19
3	East Solar Pvt. Ltd.	Baigundhura Solar Power	Jhapa	5000	2079.07.17
4	Prime Power Pvt. Ltd	Lamahi Solar Power Project	Dang	10000	2080.09.08
5	Green Infrastructure Pvt. Ltd	Solar PV Project, Dhalkebar	Dhanusha	5000	2080.09.08
6	Positive Energy Pvt. Ltd	10 MW Solar PV Project, Kapilbastu, Block-1	Kapilvastu	10000	2082.02.26
7	Positive Energy Pvt. Ltd	Grid Connected Solar PV Project Phase-2	Kapilvastu	10000	2082.02.26
8	Rapti Urja Pvt. Ltd	Solar PV Project, Rolpa	Rolpa	50000	2082.02.29
9	Sol Power Limited	Parasi Solar PV Project	Parasi	15000	2082.02.29
10	Sol Power Limited	New Nepalgunj Solar PV Project	Banke	30000	2082.02.29
11	Sol Power Limited	Bhurigaun-1 Solar PV Project	Bardiya	25000	2082.02.29
12	Sol Power Limited	Sunawal Solar PV Project	Nawalparasi	15000	2082.02.29
13	Sol Power Limited	Krishnapur Solar PV Project	Kanchanpur	15000	2082.02.29
			SUB-TOTAL	199200	
			TOTAL	4203476	

Comparison of Transmission Line Length in the last Ten Fiscal Years

S.N.	FY	Cicuit km				Total	Total Increment
		66 kV	132 kV	220 kV	400 kV		(ckt. Km)
1	2072/073	494	2417			2911	
2	2073/074	494	2596	75	78	3243	332
3	2074/075	514	2717	75	78	3384	141
4	2075/076	514	3143	255	78	3990	606
5	2076/077	514	3240	437	78	4269	280
6	2077/078	514	3541	741	78	4874	605
7	2078/079	514	3817	897	102	5329	455
8	2079/080	514	3979	1101	148	5742	413
9	2080/081	514	4136	1213	644	6508	766
10	2081/082	514	4193	1266	787	6760	252
Total Increment in Ten Years							**3850**

*** Approx 247km are additionally upgraded**

Comparison of Substation Capacity in the Last Ten Fiscal Years

S.N.	FY	Total Capacity (MVA)	Total Increment (MVA)
1	2072/073	2223	
2	2073/074	2618	394
3	2074/075	3198	580
4	2075/076	3935	738
5	2076/077	4300	364
6	2077/078	6434	2134
7	2078/079	7149	715
8	2079/080	8867	1718
9	2080/081	13050	4183
10	2081/082	14123	1073
Total Increment in Ten Years			**11899**

Summary of under construction/planned & proposed Transmission Lines /Substations

Transmission Line

S.N	Description	Voltage Level	Transmission Directorate	Project Management Directorate	Total
1	Under construction Transmission Line (Circuit km)	132 kV	811	343	1154
		220 kV	160	274	434
		400 kV	270	176	446
Total (Circuit km)			**1241**	**793**	**2034**
2	Planned and Proposed Transmission Line (Circuit km)	132 kV	840	268	1108
		220 kV	1894	0	1894
		400 kV	1717	1886	3603
Total (Circuit km)			**4451**	**2154**	**6605**

Substation

S.N	Description	Transmission Directorate	Project Management Directorate	Total
1	Under construction (MVA)	2445.50	3893.00	6338.50
2	Planned and Proposed (MVA)	9267.50	6910.00	16177.50

Existing high voltage transmission lines

SN	Description	Type of Ckts	Length Circuit km	Conductor Type	Nominal Aluminium Cross Section Area (Sq.mm)
A	132 kV Transmission Line				
1	Anarmani-Duhabi	Single	75.76	BEAR	250
2	Kushaha (Nepal)-Kataiya(India)	Single	15.00	BEAR	250
3	Duhabi-Inaruwa-Kushaha	Double	56.00	ACCC Cordoba	250
4	Kushaha-Rupani-Lahan-Mirchaiya-Dhalkebar	Double	276.00	BEAR	250
5	Parwanipur-Pathalaiya-Chapur-Nawalpur-Dhalkebar	Double	200.00	BEAR	250
6	Pathalaiya- Kamane-Hetauda	Double	76.00	ACCC Cordoba	250
7	Bharatpur-Marsyangdi P/S	Single	25.00	DUCK	300
8	Hetauda-Bharatpur	Single	70.00	PANTHER	200
9	Marsyangdi P/S-Suichatar	Single	84.00	DUCK	300
10	Matatirtha- KL2 P/S-Hetauda	Double	80.00	BEAR	250
11	Suichatar-Matatirtha	Double	8.00	ACCC Cordoba	250
12	Suichatar-Balaju	Single	5.00	ACCC Amsterdam	250
13	Balaju-Chapali-New Bhaktapur	Double	36.00	BEAR	250
14	New Bhaktapur-Lamosangu	Double	96.00	BEAR	250
15	Lamosangu-New Khimti	Single	46.00	ACCC Cordoba	250
16	Lamosangu-Bhotekoshi P/S	Single	31.00	BEAR	250
17	Bharatpur-Damauli	Single	39.00	ACCC Copenhegan	150
18	Bharatpur-Kawasoti-Bardghat	Single	70.00	PANTHER	200
19	Bardghat-Gandak P/S	Double	28.00	PANTHER	200
20	Bardghat-Butwal	Double	32.00	BEAR	250
21	New Butwal-Sunwal-Butwal	Double	54.00	ACCC Cordoba	
22	Butwal-KGA P/S	Double	116.00	DUCK	300
23	KGA P/S-Lekhnath	Double	96.00	DUCK	300
24	Lekhnath-Damauli	Single	45.00	WOLF	150
25	Lekhnath-Pokhara	Single	7.00	ACCC Copenhegan	150
26	Pokhara-Modikhola P/S	Single	37.00	BEAR	250
27	Butwal-Shivapur-Lamahi-Kohalpur	Double	430.00	BEAR	250
28	Lamahi-Jhimruk P/S	Single	50.00	DOG	100
29	Kohalpur-Bhurigaun-Lumki	Double	176.66	BEAR	250
30	Lamki-Pahalwanpur-Attariya-Mahendranagar (Lalpur)	Double	203.12	BEAR	250
31	Mahendranagar-Gaddachauki	Single	12.00	BEAR	250

32	Marsyangdi -M. Marsyangdi	Double	80.00	CARDINAL	420
33	Damak-Godak	Double	70.00	BEAR	250
34	Kusum-Hapure	Single	22.00	BEAR	250
35	Bhulbhule- Middle Marsyangdi P/S	Single	22.00	BEAR	250
36	Chameliya- Syaule- Attaria	Double	262.00	BEAR	250
37	Raxual-Parwanipur (Cross Border-Nepal Portion)	Double	32.00	BEAR	250
38	Kusaha-Kataiya (Cross Border-Nepal Portion)	Double	26.00	BEAR	250
39	Dumre Damauli	Double	46.00	BEAR	250
40	Lamahi Ghorahi	Double	25.00	BEAR	250
41	Kushma -Lower Modi	Single	6.20	BEAR	250
42	Godak- Phidim-Amarpur (Kabeli II & III)	Double	113.13	BEAR	250
43	Trishuli 3A-Trishuli 3B Hub	Double	6.00	BISON	350
44	Samundratar - Trishuli 3B Hub	Double	52.00	AAAC Upas	300
45	Singati-Lamosangu	Single	40.00	BEAR	250
46	Solu Corridor (Tingla-Mirchaiya)	Double	180.00	CARDINAL	420
47	New Modi -Lahachwok -Lekhnath	Double	84.00	BEAR	250
48	Motipur-Sandhikharka-Tamghas	Double	104.00	BEAR	250
49	Butwal-Lumbini	Double	32.00	BEAR	250
		Double UG	4.00	1C, XLPE Cu Cable	500
50	Dordi (Kirtipur-Udipur)	Double	20.00	CARDINAL	420
51	Ramechap-Garjyang-Khimti	Double	62.00	BEAR	250
52	Mainahiya Sampatiya (Cross Border-Nepal Portion)	Double	56.00	BEAR	250
53	Bardaghat-Sardi	Double	40	BEAR	250
54	New Hetauda-Old Hetauda	Double	8	BEAR	250
55	Dhalkebar-Loharpatti	Double	38	CARDINAL	420
	Total (132 kV)		**4005.87**		
B	**220 kV Transmission Line**				
1	Khimti- Dhalkebar	Double	150.00	BISON	350
2	Trishuli 3B Hub-Matatirtha	Double	98.00	BISON	350
3	Marsyandi (Markichwok)-Matatirtha	Double	164.00	MOOSE	500
4	Matatirtha- Matatirtha Substation	Double Ckt, Underground	2.50	1C, XLPE Cu Cable	1200
		Double Ckt, Underground	2.50	1C, XLPE Cu Cable	1600
5	Dana-Kushma	Double	79.6	MOOSE	500
6	Koshi Corridor (Inaruwa-Basantapur-Baneshwor-Tumlingtar)	Single	106	MOOSE	500

7	Koshi Corridor (Basantapur-Dhungesanghu)	Double	70	MOOSE	500
8	Kushma -New Butwal	Double	176	ACCC Drake	519.7
9	Bharatpur-Bardghat	Double	148	BISON	350
10	New Bharatpur-New Hetauda	Double	143.4	BISON	350
11	Chilime-Trishuli	Double	72	BISON	350
12	New Butwal - Bardaghat TL	Double	42	BISON	350
	Total (220 kV)		**1254.00**		
C	**400 kV Transmission Line**				
1	Dhalkebar-Muzzaffarpur (Nepal Portion)	Double	78.00	MOOSE	500
2	Dhalkebar-Inaruwa	Double	306.00	MOOSE	500
	Total (400 kV)		**384.00**		
D	66 kV Transmission Line				
1	Chilime P/S-Trishuli P/S	Single	39.00	WOLF	150
2	Trisuli P/S-Balaju	Double	58.00	DOG	100
3	Trisuli P/S-Devighat P/S	Single	4.56	WOLF	150
4	Devighat P/S-Okhaltar	Double	53.00	DOG	100
5	Okhaltar-Chapali	Double	5.60	XLPE Cable	500
6	Chapali-New Chabel	Double	10.00	ACCC Silvasa	100
7	New Chabel-Lainchaur	Single	7.00	XLPE Cable	500
8	Balaju-Lainchor	Single	2.00	PANTHER	200
9	Balaju-Siuchatar-KL1 P/S	Double	72.00	WOLF	150
10	KL 1 P/S-Hetauda-Simara	Double	104.00	WOLF	150
11	Simara-Parwanipur-Birgunj	Double	40.00	HTLS INVAR	150
12	Suichatar-Teku	Double	8.20	BEAR	250
13	Suichatar-New Patan	Double	13.00	ACCC Copenhegan	150
14	Teku-K3 (underground)	Double, Single Core	5.60	XLPE Cable	400/500
15	Bhaktapur- Baneshwor-Patan	Single	16.50	ACCC Silvasa	123
16	Bhaktapur-Banepa-Panchkhal-Sunkoshi P/S	Single	48.00	LGJ 120	120
17	Indrawati- Panchkhal	Single	28.00	PANTHER	200
	Total (66 kV)		**514.46**		

Under construction high voltage transmission lines

S.N.	Transmission Line	Type of Ckts	Length (Circuit km)			Conductor Type	Nominal Aluminium Cross Section Area (Sq. mm)	Expected Completion Year (FY)
			Total	Constructed till FY 81-82	Constructed in FY 81-82 only			
I	**Transmission Directorate**							
A	**132 kV Transmission Line**							
1	Singati-Lamosangu 2nd Circuit	Single	40	40		BEAR	250	2025/26
3	Burtibang-Paudi Amarai-Tamghas	Double	66			BEAR	250	2025/26
4	Kushaha- Biratnagar	Double	46	46	30	BEAR	250	2025/26
6	Kohalpur-Surkhet-Dailekh	Double	168	85	41	BEAR	250	2026/27
7	Balefi Corridor	Double	40			CARDINAL	420	2025/26
8	Dhalkebar- Balganga	Double	48			CARDINAL	420	2025/26
9	Kaligandaki- Ridi	Double	44	10	10	BEAR	250	2025/26
10	Nawalpur (Lalbandi) Salimpur	Double	40			BEAR	250	2025/26
11	Bhumahi-Hakui	Double	32			BEAR	250	2025/26
12	Kabeli (Amarpur) Dhungesangu	Double	40			BEAR	250	2025/26
13	Godak Soyak	Double	16			BEAR	250	2025/26
14	Kushma -Lower Modi -Modi	Double	30			BEAR	250	2025/26
15	Birgunj-Parsauni UG	Double	5.6	5.6	5.6	1C, XLPE Cu Cable		2025/26
16	Barhabise Lamosaghu 2nd Circuit (Sunkoshi 132 kV SS)	Single	12			BEAR	250	2025/26
17	Nepalgunj-Nanpara Cross Border	Double	33			BEAR	250	2025/26
18	Bafikot-Madichaur (Khungri)	Double	150			CARDINAL	250	2025/26
Total			**811**	**187**	**87**			
B	**220 kV Transmission Line**							
3	Tumlingtar-Sitalpati	Double	36			MOOSE	500	2025/26
4	Lekhnath-Damauli	Double	90.00			MOOSE	500	2027/28
5	Galchhi - Ratmate	Double	34.00			MOOSE	500	2026/27
Total			**160**	**0**	**0**			

C	**400 kV Transmission Line**							
1	Hetauda-Dhalkebar	Double	270	230	126	MOOSE	500	2025/26
Total			**270**	**230**	**126**			
II	**Project Management Directorate**							
A	**132 kV Transmission Line**							
1	Lapsifedi - Changunarayan - Duwakot	Double	28	0	0	BEAR	250	
2	Parwanipur - Pokhariya **	Double	84	0	0	ACCC Amsterdam	376	2027/28
3	Bhaktapur - Thimi - Balkumari**	Double	24	0	0	Single Core XLPE	800 sq. MM Cu	2027/28
5	Dandakhet - Rahughat	Double	50	0	0	CARDINAL	420	2025/26
6	Ghorahi - Madichaur	Double	80	0	0	CARDINAL	420	2026/27
7	Borang - Lapang	Double	48	0	0	BEAR	250	2027/28
8	Chobhar Patan	Double	9	0	0	Single Core XLPE	800 sq. MM Cu	2025/26
9	Kohalpur Nepalgunj	Double	20	0	0	BEAR	250	2026/27
	Total		**343**					
B	**220 kV Transmission Line**							
1	Dharapani - Khudi TL	Double	56	0	0	Moose	500	2026/27
2	Khudi - Udipur TL	Double	36	0	0	ACCC Drake	519.7	2025/26
3	Udipur - Bharatpur TL	Double	134	12	6	ACCC Drake	519.7	2025/26
4	Lapang - Ratmate TL	Double	48	0	0	Twin Moose	500	2026/27
Total			**274**	**12.0**	**6.0**			
C	**400 kV Transmission Line**							
1	New Khimti - Barhabise	Double	84	84	14	MOOSE	500	2025/26
2	Barhabise - Kathmandu	Double	92	89	3	MOOSE	500	2025/26
Total			176	173	17			

(Note : ** - In the process of Procurement)

Planned and proposed high voltage transmission lines

S.N.	Description	Type of Ckts	Length Circuit km	Conductor Type	Nominal Aluminium Cross Section Area (Sq.mm)
I	**Transmission Directorate**				
A	**400 kV Transmission Line**				
1	Arun Hub (Sitalpati)- Inaruwa	Double	188.00	MOOSE	500
2	Inaruwa Anarmani	Double	179.20	MOOSE	500
3	Arun Hub-Tingla	Double	152.00	MOOSE	500
4	Tingla-Dudhkoshi	Double	70.00	MOOSE	500
5	Dudhkoshi-Dhalkebar	Double	160.00	MOOSE	500
6	Nijgadh -Harniya	Multi	140.00	MOOSE	500
7	Harnaiya-Bodebarsain	Multi	708.00	MOOSE	500
8	Inaruwa - Purnia	Double	50.00	MOOSE	500
9	Lamki (Dododhara) - Bareli	Double	70.00	MOOSE	500
Total			**1717.20**		
B	**220 kV Transmission Line**				
1	Koshi Corridor (Inaruwa-Basantapur-Baneshwor-Tumlingtar)	Single	106	MOOSE	500
2	Dhaubadi Iron Mine	Double	16.00	BISON	350
3	Gandak Nepalgunj	Multi	1276.00	MOOSE	500
4	Kathmandu Valley Transmission System Expansion	Multi, Double	320.00		
5	Chilime-Kerung	Double	52.00	MOOSE	500
6	Chameliya-Jauljibi	Double	64.00	MOOSE	500
7	Lapan-Budigandaki	Double	60.00	MOOSE	500
Total			**1894.00**		
C	**132 kV Transmission Line**				
1	Attariya- Dhangadi	Double	36.00	BEAR	250
2	Auraha-Simara	Double	12.00	BEAR	250
3	Dhaubadi-Meghauli	Double	30.00	BEAR	250
4	Damak-Keraun-Biratnagar (Barju)	Double	130.00	BEAR	250
5	Rupani-Bodebarsain	Double	36.00	BEAR	250
6	Lahan Sukhipur	Double	34.00	BEAR	250
7	Chandrapur-Sukhdevchaur (Rajpur)	Double	70.00	BEAR	250
8	Godak -Anarmani	Double	116.00	BEAR	250

9	Samundratar-Lapsifedi	Double	56.00	BEAR	250
10	Dadakhet-Burtibang	Double	70.00	BEAR	250
11	Kamane-Faparbari (Jhurjhure)	Double	90.00	BEAR	250
12	Shyaule-Safebagar	Double	160.00	BEAR	250
Total			**840.00**	**BEAR**	**250**
II	**Project Management Directorate**				
A	**400 kV Transmission Line**				
1	Nijgadh - Ramauli	Double	76.00	MOOSE	500
2	New Butwal-Lamahi	Double	340.00	MOOSE	500
3	Lamahi-New Kohalpur	Double	180.00	MOOSE	500
4	New Kohalpur-Dododhara	Double	190.00	MOOSE	500
5	Dododhara(New Lamki)-New Attariya (Daiji)	Double	180.00	MOOSE	500
6	Tingla Hub-Likhu Hub- New Khimti	Double	110.00	MOOSE	500
7	New Khimti-Tamakoshi 3-Sunkoshi Hub-Dhalkebar	Double	220.00	MOOSE	500
8	Budhigandaki Corridor (Philim-Gumda-Ratamate)	Double	190.00	MOOSE	500
9	Damauli-Kusma-Burtibang-Bafikot	Double	400.00	MOOSE	500
	Total:		**1886.00**		
B	**220 kV Transmission Line**				
1	Okharpauwa-Tinpiple (LILO of existing UT3A-Matatirtha Line)	Multi	16	BISON	350
	Total:		**16.00**		
B	**132 kV Transmission Line**				
1	Dailekh - Kalikot - Jumla	Double	164.00	BEAR	250
2	Lamosangu - Kavre/Ramechhap	Double	80.00	BEAR	250
3	LILO of Nepalgunj-Nanpara Line	Multi	24.00	BEAR	250
Total			**268.00**		

Existing high voltage grid substations

S.No	Substation	Voltage Ratio kV	Capacity FY 080-81 MVA	Capacity FY 081-82 MVA	Total Increment in FY 081-82 (MVA)
A	**Kathmandu Grid Division**				
1	Balaju	132/66	45	45	0
		66/11	22.5	22.5	0
		66/11	22.5	22.5	0
		66/11	22.5	22.5	0
2	Chapali	132/11	45	45	0
		132/11	45	45	0
		132/66	49.5	49.5	0
		132/66	49.5	49.5	0
3	Siuchatar	132/66	37.8	37.8	0
		132/66	37.8	37.8	0
		132/66	37.8	37.8	0
		132/11	30	30	0
		66/11	18	18	0
		66/11	18	18	0
4	New Chabel	66/11	22.5	22.5	0
		66/11	22.5	22.5	0
		66/11	22.5	22.5	0
		66/11	22.5	22.5	0
5	Lainchour	66/11	30	30	0
		66/11	30	30	0
6	New Patan	66/11	30	30	0
		66/11	30	30	0
		66/11	30	30	0
		66/11	30	30	0
7	Teku	132/11	45	45	0
		132/11	45	45	0
		66/11	45	45	0
		66/11	45	45	0
8	K3	66/11	22.5	22.5	0
		66/11	22.5	22.5	0
9	Baneshwor	66/11	30	30	0
		66/11	30	30	0
10	Bhaktapur	132/66	49.5	49.5	0
		132/66	49.5	49.5	0
		132/11	45	45	0
		132/11	45	45	0
		132/11	45	45	0
11	Banepa	66/11	22.5	22.5	0
		66/11	22.5	22.5	0
12	Panchkhal	66/11	10	10	0
13	Matatirtha	220/132	53.33	53.33	0
		220/132	53.33	53.33	0
		220/132	53.33	53.33	0
		220/132	53.33	53.33	0
		220/132	53.33	53.33	0
		220/132	53.33	53.33	0
		132/33	30	30	0
		132/11	22.5	22.5	0
		132/11	45	45	0
14	Bagmati	66/33	10		-10
		66/11	6		-6

15	Samundratar	132/33	30	30	0
		132/33	30	30	0
		33/11	8	8	0
		33/11	8	8	0
16	Trishuli 3B HUB	220/132	53.33	53.33	0
		220/132	53.33	53.33	0
		220/132	53.33	53.33	0
		220/132	53.33	53.33	0
		220/132	53.33	53.33	0
		220/132	53.33	53.33	0
		132/33	50	50	0
17	Chilime HUB	220/132	53.33	53.33	0
		220/132	53.33	53.33	0
		220/132	53.33	53.33	0
		220/132	53.33	53.33	0
		220/132	53.33	53.33	0
		220/132	53.33	53.33	0
		132/33	50	50	0
18	Malekhu	132/33		30	30
		132/33		30	30
19	Mulpani	132/11		45	45
		132/11		45	45
B	**Hetauda Grid Division**				
20	Hetauda	132/66	45	45	0
		132/66	45	45	0
		66/11	10	10	0
		66/11	30	30	0
21	Kamane	132/33	63	63	0
		132/33	30	30	0
		33/11	24	24	0
		33/11	16.6	16.6	0
22	Bharatpur	132/33	30	30	0
		132/33	30	30	0
		132/11	22.5	22.5	0
		132/11	22.5	22.5	0
23	New Bharatpur	220/132	160	160	0
		220/132	160	160	0
		132/11	30.0	30.0	0
		132/11		45.0	45
24	Birgunj	66/33	30	30	0
		66/33	30	30	0
		66/11	30	30	0
		66/11	30	30	0
25	Parwanipur	132/11	22.5	22.5	0
		132/11	22.5	22.5	0
		132/11	22.5	22.5	0
		132/11	22.5	22.5	0
		132/66	63	63	0
		132/66	63	63	0
		132/66	63	63	0
		132/33	63	63	0
26	Simra	66/11	15	15	0
		66/11	15	15	0
27	Amlekhgunj	132/66		100	100
		132/66		100	100
		66/11	10	10	0
28	Pathlaiya	132/11	22.5	22.5	0
		132/33	30	30	0

29	Purbi Chitwan	132/33	30	30	0
		132/33	30	30	0
		33/11	16.6	16.6	0
30	New Hetauda	400/220	166.67	166.67	0
		400/220	166.67	166.67	0
		400/220	166.67	166.67	0
		220/132	160	160	0
		220/132	160	160	0
		132/11	10	10	0
31	Kulekhani	66/11		22.5	22.5
C	**Dhalkebar Grid Branch**				
32	Lahan	132/33	30	30	0
		132/33	63	63	0
		33/11	16.6	16.6	0
		33/11	16.6	16.6	0
33	Chapur	132/33	63	63	0
		132/33	63	63	0
		33/11	16.6	16.6	0
34	Dhalkebar	400/220	315	315	0
		400/220	315	315	0
		400/220	315	315	0
		220/132	315	315	0
		220/132	315	315	0
		220/132	160	160	0
		220/132	160	160	0
		132/33	63	63	0
		132/33	63	30	-33
		33/11	16.6	16.6	0
		33/11	16.6	16.6	0
35	Mirchaiya	132/33	30	30	0
		132/33	30	30	0
		33/11	16.6	16.6	0
36	Nawalpur	132/33	63	63	0
		33/11	16	16	0
37	Rupani	132/33	63	63	0
38	Loharpatti	132/33		60	60
		132/11		22.5	22.5
D	**Duhabi Grid Division**				
39	Tingla	132/33	30	30	0
		33/11	8	8	0
40	Duhabi	132/33	63	63	0
		132/33	63	63	0
		132/33	63	63	0
		132/33	63	63	0
		33/11	24	24	0
		33/11	24	24	0
41	Anarmani	132/33	30	30	0
		132/33	63	63	0
		132/33	30	30	0
		33/11	24	24	0
		33/11	24	24	0
42	Damak	132/33	63	63	0
		132/33	63	63	0
		33/11	16.6	16.6	0
		33/11	16.6	16.6	0
43	Godak	132/33	63	63	0
		33/11	8	8	0
44	Phidim	132/33	20	20	0
		33/11	3	3	0

45	Amarpur (Kabeli)	132/33	30	30	0
		33/11	3	3	0
46	Kushaha	132/11	22.5	22.5	0
47	Inaruwa	400/220	315	315	0
		400/220	315	315	0
		400/220	315	315	0
		220/132	160	160	0
		220/132	160	160	0
		220/33	63	63	0
		220/33	63	63	0
48	Tumlingtar	220/132	100	100	0
		220/132	100	100	0
		132/33	30	30	0
		132/33	30	30	0
49	Baneshwor	220/33	30	30	0
		220/33	30	30	0
50	Basantapur	220/132	33.33	33.33	0
		220/132	33.33	33.33	0
		220/132	33.33	33.33	0
		220/132	33.33	33.33	0
		220/132	33.33	33.33	0
		220/132	33.33	33.33	0
		132/33	30	30	0
51	Dhungesanghu	132/33	30	30	0
E	**Butwal Grid Division**				
52	Butwal	132/33	63	63	0
		132/33	63	63	0
		132/33	63	63	0
		33/11	24.0	24.0	0
		33/11	16.6	16.6	0
		33/11	16.6	16.6	0
53	Bardghat	132/11	22.5	22.5	0
		132/11	22.5	22.5	0
54	Chanauta	132/33	30	30	0
		132/33	30	30	0
		33/11	16.6	16.6	0
		33/11	8	8	0
55	Kawasoti	132/33	30	30	0
		132/33	30	30	0
		33/11	16.6	16.6	0
56	Gandak	132/33	30	30	0
		132/33	30	30	0
		33/11	16.6	16.6	0
		33/11	16.6	16.6	0
57	Motipur	132/33	30	30	0
		33/11	16	16	0
58	Sandhikharka	132/33	30	30	0
		33/11	16	16	0
59	Mainahiya	132/33	45	45	0
		132/33	45	45	0
		33/11	16	16	0
60	New Butwal	220/132	100	100	0
61	Sunwal	132/33	63	63	0
		132/33	63	63	0
		132/11	22.5	22.5	0
62	Tamghas	132/33	30	30	0
		33/11	16	16	0
63	Paudi Amarai	132/33		30	30
		33/11		16	16

64	Burtibang	132/33		30	30
		33/11		16	16
F	**Pokhara Grid Division**				
65	Damauli	132/33	30	30	0
		132/33	15	15	0
		33/11	16.6	16.6	0
		33/11	3	3	0
66	Pokhara	132/11	30	30	0
		132/11	30	30	0
67	Lekhnath	132/33	30	30	0
		132/11	22.5	22.5	0
		132/11	30	30	0
68	Markichowk	220/132		53.33	53.33
		220/132		53.33	53.33
		220/132		53.33	53.33
		220/132		53.33	53.33
		220/132		53.33	53.33
		220/132		53.33	53.33
		132/33	12	12	0
69	Syangja	132/33	30	30	0
		33/11	8	8	0
70	Dana	220/132	100	100	0
		132/33	25	25	0
71	Kushma	220/132	100	100	0
72	Lahachowk	132/33	30	30	0
		33/11	8	8	0
73	Kirtipur	132/11	10	10	0
74	Udipur	220/132		53.33	53.33
		220/132		53.33	53.33
		220/132		53.33	53.33
		132/33		50	50
G	**Attaria Grid Division**				
75	Attaria	132/33	63.0	63.0	0
		132/33	63.0	63.0	0
		33/11	16.6	16.6	0
		33/11	16.6	16.6	0
76	Lamki	132/33	15	15	0
		132/33	15	15	0
		33/11	16.6	16.6	0
77	Mahendranagar	132/33	30	30	0
		132/33	30	30	0
		132/33	30	30	0
		33/11	16.6	16.6	0
78	Pahalmanpur	132/33	30	30	0
		33/11	8	8	0
79	Syaule	132/33	30	30	0
		33/11	8	8	0
H	**Khimti Grid Section**				
80	New Khimti	220/132	66.67	66.67	0
		220/132	66.67	66.67	0
		220/132	66.67	66.67	0
		220/132	100	100	0
		132/33	30	30	0
		132/33	30	30	0
81	Singati	132/33	30	30	0
82	Garjyang	132/33	30	30	0
		33/11	8	8	0
83	Indrawati	66/11	10	10	0
84	Lamosanghu	132/33	63	63	0

I	Kohalpur Grid Section				
85	Kohalpur	132/33	63	63	0
		132/33	63	63	0
		33/11	16.6	16.6	0
		33/11	16.6	16.6	0
86	Bhurigaon	132/33	30	30	0
		33/11	8	8	0
87	Kusum	132/11	12.5	12.5	0
88	Hapure	132/33	30	30	0
		33/11	8	8	0
89	Lamahi	132/33	63	63	0
		132/33	63	63	0
		33/11	16.6	16.6	0
		33/11	8	8	0
90	Ghorahi	132/33	63	63	0
		132/33	30	30	0
		33/11	16.6	16.6	0

Existing high voltage grid substations

S.No	Voltage Rating (kV)	Transformer No.	Capacity FY 080-81	Capacity FY 081-82	Total Increment (MVA)
1	400/220	9	2390	2390	0
2	220/132	52	3870	4350	480
3	220/33	4	186	186	0
4	132/66	14	635	835	200
5	132/33	89	3532	3729	197
6	132/11	31	835	993	158
7	66/33	3	70	60	-10
8	66/11	34	780	796	17
9	33/11	54	752	784	32
	Total	**290**	**13050**	**14123**	**1073**

Under construction high voltage grid substations

S.No	Name of Project	Substation	Voltage Level (Ratio) kV	Capacity MVA	Total Capacity MVA	Expected Completion Year AD
I	**Transmission Directorate**					
1	Kushaha Biratnagar 132 kV Transmission Line	Biratnagar	132/33 33/11	3 Ø, 2x63 3 Ø, 16	142	2025/26
2	Tumlingtar Sitalpati 220 kV Transmission Line	Sitalpati	220/132 132/33	1 Ø, 7x33.33 Bank 1 Ø, 4x8 Bank	224	2025/26
3	Kaligandaki Ridi132 kV Transmission Line	Ridi	132/33 33/11	3 Ø, 30 3 Ø, 8	38	2025/26
4	Lalbandi Salimpur 132 kV Transmission Line	Salimpur	132/33 33/11	3 Ø, 2x30 3 Ø, 1x24	84	2025/26
5	Dhalkebar Balganga 132 kV Transmission Line	Balganga	132/33	3 Ø, 2x63	126	2025/26
6	Bhumahi Hakui132 kV Transmission Line	Hakui	132/33 33/11	3 Ø, 2x100 3 Ø, 1x16.5	216.5	2025/26
8	Lekhnath Damauli 220 kV Transmission Line	Lekhnath	220/132	1 Ø, 7x100 Bank	600	2027/28
		Damauli	220/132	3 Ø, 2x63	126	2027/28
			132/33	3 Ø, 2x30	60	2027/28
			33/11	3 Ø, 2x8	16	2027/28
9	Birgunj Parsauni 132 kV UG Transmission Line	Parsauni	132/33 33/11	3 Ø,2x100 3 Ø,2x24	248	2025/26
		Birgunj	132/66	3 Ø,2x100	200	2025/26
10	New Khimti - Lamosanghu Kathmandu Transmission Line Upgradation	New Khimti	220/132	1 Ø, 3x66.67 Bank	200	2026/27
11	Surkhet 132 kV Substation	Surkhet	132/33	3 Ø,2x30	60	2025/26
12	Kohalpur - Surkhet-Dailekh 132 kV Transmission Line	Dailekh	132/33 33/11	3 Ø,2x30 3 Ø,2x22.5	105	2025/26
Total					**2,445.50**	
II	**Under Project Management Directorate**					
1	220 kV Bahrabise Substation	Barhabise	220/132	1 Ø, 4x53.33	165	2025/26
			132/11	3 Ø, 1x5		2025/26

2	Kathmandu Valley Transmission Capacity Reinforcement Project	Chobhar	132/11	3 Ø, 2x45	90	2025/26
		Futung	132/11	3 Ø, 2x45	90	2025/26
		Thimi	132/11	3 Ø, 2x45	90	2025/26
3	Marsyangdi Corridor 220 kV TL Project	Khudi	220/132	1 Ø, 4x53.33	210	2025/26
			132/33	3 Ø, 1x50		2025/26
		Dharapani	132/33	1 Ø, 4x33.33	130	2027/28
			132/33	3 Ø, 1x30		2027/28
4	Lapsiphedi and Changunarayan SS Project	Lapsiphedi	220/132	1 Ø, 4x53.33	182.5	2025/26
			132/11	3 Ø, 1x22.5		2025/26
		Changunarayan	132/11	3 Ø, 1x45	45	2025/26
		Teku	132/66	3 Ø, 1x63	63	2025/26
5	New Khimti - Barhabise - Lapsiphedi 400 kV SS Project	New Khimti	400/220	1 Ø, 7x105	630	2025/26
		Barhabise	400/220	1 Ø, 7x53.33	320	2025/26
		Lapsiphedi	400/220	1 Ø, 4x105	315	2025/26
6	Parwanipur - Pokhariya 132 kV TL Project**	Pokhariya	132/33	3 Ø, 2x63	171	2027/28
			132/11	3 Ø, 1x45		2027/28
7	Kathmandu Valley Transmission Capacity Reinforcement Project (Phase II)**	Balkumari	132/66	3 Ø, 2x63	216	2027/28
			132/11	3 Ø, 2x45		2027/28
8	Borang-Lapang 132 kV and Lapang-Ratmate 220 kV Transmission Line and Substation project	Borang	132/33	3 Ø, 30	30	2027/28
		Lapang	220/132 132/33	1 Ø, 7x33.33 3 Ø, 30	230	2027/28
9	Ghorahi Madichaur 132 kV Transmission Line	Madichaur	132/33	3 Ø, 30	30	2026/27
10	Dadakhet Rahughat132 kV Transmission Line	Dadakhet	132/33	3 Ø, 30	30	2025/26
		Rahughat	220/132 132/33	1 Ø, 7x33.33 3 Ø, 30	230	2025/26
11	132 kV Pangtang Substation	Pangtang	132/33	3 Ø, 30	30	2026/27
12	132 kV Keraun Substation	Keraun	132/33	3 Ø, 2x63	148.5	2025/26
			132/11	3 Ø, 22.5		2025/26
14	132 kV Dumkibas Substation	Dumkibas	132/33	3 Ø, 2x30	60	2025/26
16	132 kV Bakaspur Substation	Bakaspur, Nepalgunj	132/33	3 Ø, 2x63	126	2026/27
17	132 kV New Patan substation **	New Patan	132/66	3 Ø, 2x63	261	2025/26
			132/11	3 Ø, 3x45		2025/26
Total					**3893**	

Planned and proposed construction high voltage grid substations

S.No	Name of Project	Substation	Voltage Level (Ratio) kV	Capacity MVA	Total Capacity MVA
I	**Transmission Directorate**				
1	Dhaubadi Iron Mine 220 kV Transmission Line	Dhaubadi	220/132 132/33	3 Ø, 2x160 3 Ø, 2x63	446
2	Dharan 220/33 kV substation	Dharan	220/33 33/11	3 Ø, 63 3 Ø, 10	73
3	Palpa 220 kV Substation	Palpa	220/132 132/33 33/11	1 Ø,7x53.33 3 Ø,2x63 3 Ø,2x16	478
4	Godak Anarmani 132 kV Transmission Line	Anarmani	132/33	3 Ø, 2x63	126
5	Lahan - Sukhipur 132 kV Transmission Line	Sukhipur	132/33	3 Ø,2x30	60
6	Rupani - Bodebarsain 132 kV Transmission Line	Bodebarsain	132/33	3 Ø,2x30	60
7	Chandrapur - Sukhdevchaur 132 kV Transmission Line	Sukhdevchaur	132/33	3 Ø,2x63 3 Ø,25	151
8	Birauta 132 kV Substation	Birauta	132/11	3 Ø,2x30	60
9	Syaule-Safebagar 132 kV Transmission Line	Safebagar	132/33 33/11	3 Ø,2x30 3 Ø,1x16	76
10	Bafikot-Khungri (Madichaur) 132 kV Transmission Line	Ghartigaun	132/33 33/11	3 Ø,1x30 3 Ø,1x16	46
11	Kathmandu Valley System Reinforcement	Ratnapark	132/11	3 Ø,2x45	90
		Singhdarbar (k3)	132/11	3 Ø,2x45	90
		Maharajgunj	132/11	3 Ø,2x45	90
		Sirutar	132/11	3 Ø,2x30	60
12	Attariya Dhangadhi 132 kV Transmission Line	Dhangadhi	132/33 33/11	3 Ø,2x63 3 Ø,1x22.5	148.5
13	Auraha Simara 132 kV Transmission Line	Auraha	132/33 33/11	3 Ø,2x63 3 Ø,2x22.5	171
14	Dhaubadi-Meghauli 132kV Transmission Line	Gaidakot	132/33 33/11	3 Ø,2x30 3 Ø,1x22.5	82.5
		Meghauli	132/33 33/11	3 Ø,2x63 3 Ø,1x22.5	148.5
15	Kathmandu Valley Transmission System Expansion	Agreegate	220, 132 and 66 kV		4129

16	Nijgadh 400 kV Substation	Nijgadh	400/220 220/132 132/33	3 Ø,2x500 3 Ø,2x200 3 Ø,2x63	1526
17	Nijgadh-Harnaiya 400 kV Transmission Line	Harnaiya	220/132 132/33	3 Ø,2x200 3 Ø,2x63	526
18	Harnaiya-Bodhebarsain 400 kV Transmission Line	Bodebarsain	400/132	3 Ø,2x315	630
Total					**9267.5**
II	**Project Managment Directorate**				
4	New Butwal - Lamahi - Kohalpur - New Lamki - New Attariya 400 kV Transmission Line	Lamahi	400/220/132	630	720
			132/11	90	
		New Kohalpur	400/220/132	630	720
			132/11	90	
		New Attariya	400/220/132	630	720
			132/11	90	
5	Tingla Hub-Likhu Hub- New Khimti 400 kV Transmission Line	Likhu Hub	400/220/132	630	630
6	New Khimti-Tamakoshi 3-Sunkoshi Hub-Dhalkebar 400 kV Transmission Line	Sunkoshi Hub	400/220/132	630	630
7	Budhigandaki corridor 400 kV Transmission Line	Philim / Gumda	400/220/132	630	630
8	Dailekh - Kalikot - Jumla 132 kV Transmission Line	Kalikot	132/33	63	108
			132/11	45	
		Jumla	132/33	63	108
			132/11	45	
9	Damauli - Kushma - Burtibang - Banfikot 400 kV Transmission Line	Kushma	400/220/132	630	630
		Burtibang	400/220/132	630	630
		Banfikot	400/220/132	630	630
10	Lamosangu - Kavre / Ramechhap 132 kV Transmission Line	Kavre/ Ramechhap	132/33	63	108
			132/11	45	
11	Nepalgunj-Nanpara 132 kV Transmission Line	Old Nepalgunj (33/11 kV)	132/33	3 Ø, 2x30	60
12	Okharpauwa-Tinpiple 220 kV Transmission Line	Tinpiple	220/132	1 Ø, 7x66.67 Bank	400
			132/66	3 Ø, 2x63	126
			132/11	3 Ø, 2x30	60
Total					**6910**

DCSD Loss Percentage

S. No.	Category	Koshi PO	Madhesh PO	Bagmati PO	Bagmati PDO	Gandaki PO	Lumbini PO	Lumbini PDO	Karnali PO	Sudurpaschim PO	Total
1	Received Energy, KWH	2,203,730,957	2,828,234,792	2,725,014,399	818,983,483	810,717,939	1,819,116,743	822,828,922	120,984,694	488,007,651	12,637,619,581
2	Sales Energy, KWH	1,933,358,371	2,430,751,284	2,547,531,572	748,672,787	740,425,603	1,662,472,325	739,626,048	100,399,129	421,619,983	11,324,857,102
3	Loss Unit, KWH	270,372,586	397,483,509	177,482,827	70,310,696	70,292,336	156,644,418	83,202,874	20,585,565	66,387,668	1,312,762,479
4	Loss percentage (2024/025)	12.27%	14.05%	6.51%	8.59%	8.67%	8.61%	10.11%	17.02%	13.60%	10.39%
	Loss percentage (2023/024)	9.87%	15.29%	5.60%	7.19%	7.96%	7.67%	8.59%	21.79%	11.50%	9.59%
5	Loss percentage (2022/023)	10.38%	13.79%	6.29%	9.82%	8.47%	8.48%	8.60%	16.20%	10.99%	9.76%
6	Loss percentage (2021/022)	11.72%	14.17%	6.97%	7.38%	9.10%	12.83%	9.81%	15.27%	13.30%	10.86%

*PO=Provincial Office, PDO=Province Division Office

Distribution System Data FY 2081/082

S.No.	Provincial Office	Number of 33/11 kV Substations	Substation Capacity (MVA)	Line Length (km)			Distribution Transformers	
				33 kV	11 KV	0.4/0.23 kV	Total Quantity	Capacity (MVA)
1	Koshi PO	35	676.9	1,369.21	10,845.44	28,771.80	9,458.00	795.11
2	Madhesh PO	30	730.8	850	7,230.00	24,870.30	8,043.00	810
3	Bagmati PO	24	203.6	547.15	8,177.61	26,848.05	9,261.00	1,123.20
4	Bagmati PDO	13	172.8	339.41	3,861.67	10,024.71	3,489.00	294.5
5	Gandaki PO	26	261.85	807.03	5,906.21	15,123.50	4551	375.95
6	Lumbini PO	27	409.5	1,513.11	5,109.17	15,066.72	5,247.00	493.35
7	Lumbini PDO	13	212.8	1,274.04	4,188.10	11,844.80	3,440.00	329.05
8	Karnali PO	14	93.1	634.9	3,066.79	8,057.20	1,933.00	113.66
9	Sudurpaschim PO	29	238.6	810.37	4,746.32	16,183.05	3,203.00	203.37
	Total	211	2999.95	8145.22	53131.31	156790.13	48625.00	4538.19

Reliability Parameter: SAIFI and SAIDI Parameters

Month	DCSD		Bagmati Province		Gandaki Province		Hetauda Division		Koshi Province		Lumbini Province		Sudur Paschim Province		Karnali Province		Nepalgunj Division		Madhesh Province	
	freq	hrs	freq	hrs	freq	hrs	freq	hrs	freq	hrs	freq	hrs	freq	hrs	freq	hrs	freq	hrs	freq	hrs
2081-04	129.021	59.43	39.70	16.83	131.90	61.01	100.45	44.63	108.73	46.69	116.31	53.94	162.22	68.58	248.71	119.35	159.52	73.14	185.17	89.30
2081-05	128.32	64.79	43.73	20.40	148.74	75.80	91.76	43.38	104.82	50.77	114.21	59.44	201.79	90.11	269.10	136.68	163.78	77.39	171.48	92.57
2081-06	112.36	61.25	42.60	21.71	127.32	71.36	84.22	44.11	108.33	54.93	102.62	57.10	139.05	72.20	226.72	131.86	139.98	78.13	146.07	81.73
2081-07	71.21	38.57	24.07	12.33	73.98	40.23	48.99	27.13	60.32	32.29	66.78	36.29	91.39	45.42	149.73	83.36	107.74	56.25	99.01	55.25
2081-08	68.09	32.51	18.63	8.23	56.87	28.75	31.89	16.01	49.67	23.69	57.77	26.96	77.28	37.12	192.66	97.27	121.15	56.45	111.48	53.00
2081-09	59.71	28.84	23.88	12.19	58.65	30.20	32.69	15.94	49.66	22.87	60.23	28.91	76.83	34.76	156.84	78.86	88.15	42.47	81.67	39.19
2081-10	54.94	27.96	16.60	8.62	57.02	27.60	30.78	14.90	43.79	20.38	63.61	31.79	60.22	30.14	150.49	76.72	85.85	43.85	74.90	40.54
2081-11	66.32	32.17	27.49	12.13	62.27	29.92	41.81	20.60	59.85	28.55	72.67	34.58	91.69	42.30	147.93	78.34	98.62	49.47	83.10	41.38
2081-12	86.30	42.46	30.79	12.68	89.12	45.37	63.82	31.44	78.15	40.50	96.05	46.28	108.14	53.06	193.71	100.29	119.40	56.77	109.46	54.52
2082-01	109.79	57.16	35.96	18.83	106.02	51.43	85.30	45.92	100.57	46.61	103.27	58.86	136.09	67.80	230.08	125.09	158.04	87.88	155.01	80.93
2082-02	150.42	84.56	49.71	29.27	150.05	83.38	135.89	75.64	131.95	70.06	133.78	75.93	208.74	106.40	299.68	173.45	213.22	117.77	206.82	101.85
2082-03	153.76	65.69	57.80	22.93	141.08	60.86	136.60	55.30	131.98	54.47	143.75	63.64	205.93	84.80	344.83	157.67	237.82	106.92	202.25	86.37
FY. 2081-082	**1190.24**	**595.40**	**410.95**	**196.17**	**1203.01**	**605.92**	**884.21**	**435.01**	**1027.82**	**491.81**	**1131.05**	**573.72**	**1559.38**	**732.69**	**2610.48**	**1358.93**	**1693.25**	**846.48**	**1626.43**	**816.63**
Yearly Availability of Electricity wrt to time (%)	**93.20**		**97.76**		**93.08**		**95.03**		**94.39**		**93.45**		**91.64**		**84.49**		**90.34**		**90.68**	

POWER DEVELOPMENT MAP OF NEPAL

EXISTING / UNDER CONSTRUCTION TRANSMISSION LINES / SUBSTATIONS

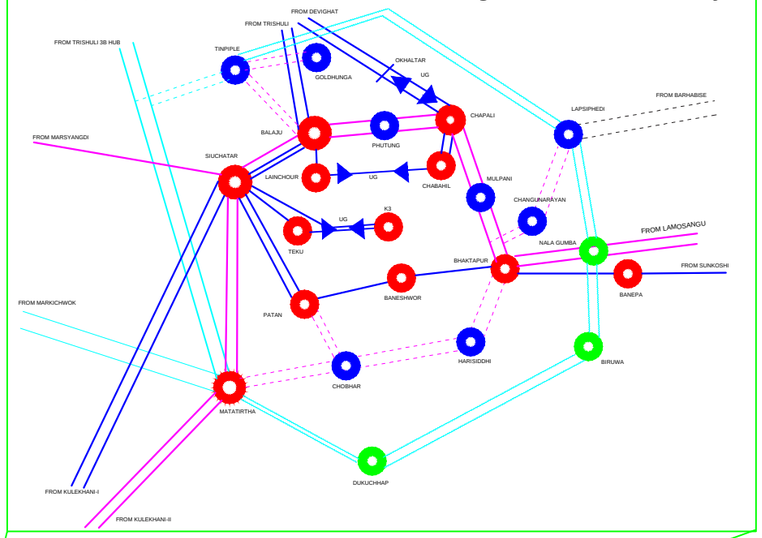
(NOT TO SCALE)

N

CHINA

INDIA

220,132 and 66 kV Network Feeding Kathmandu Valley



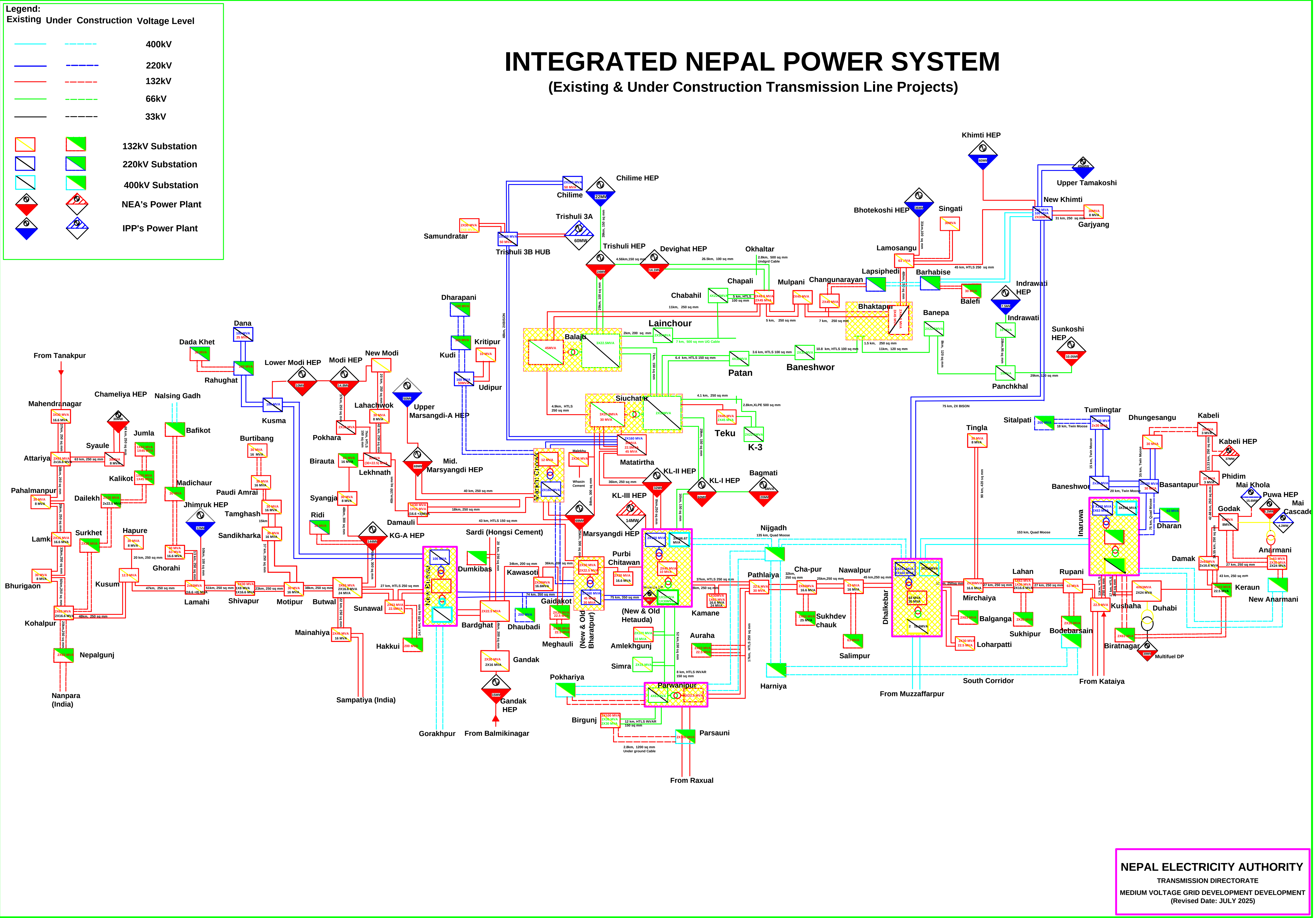
LEGENDS

EXISTING	UNDER-CONST.	PLANNED	
———	- - - - - -	~~~~~	400 kV TRANSMISSION LINE
———	- - - - - -	~~~~~	220 kV TRANSMISSION LINE
———	- - - - - -	~~~~~	132 kV TRANSMISSION LINE
———			66 kV TRANSMISSION LINE
●	●	●	GRID SUB-STATION

NEPAL ELECTRICITY AUTHORITY
TRANSMISSION DIRECTORATE
MEDIUM VOLTAGE GRID DEVELOPMENT DEPARTMENT
(Revised Date: JULY 2025)

INTEGRATED NEPAL POWER SYSTEM

(Existing & Under Construction Transmission Line Projects)



Legend:
Existing
Under Construction
Voltage Level
400kV
220kV
132kV
66kV
33kV
132kV Substation
220kV Substation
400kV Substation
NEA's Power Plant
IPP's Power Plant
Khimti HEP
Upper Tamakoshi
New Khimti
Garjyang
Chilime HEP
Chilime
Trishuli 3A
Samundratar
Trishuli 3B HUB
Trishuli HEP
Devighat HEP
Okhaltar
Bhotekoshi HEP
Singati
Lamosangu
Lapsiphedi
Barhabise
Balefi
Indrawati HEP
Indrawati
Chapali
Chabahil
Mulpani
Changunarayan
Bhaktapur
Banepa
Sunkoshi HEP
Panchkhal
Lainchour
Balaju
Patan
Baneshwor
Siuchatar
Teku
K-3
Matatirtha
KL-II HEP
KL-I HEP
Bagmati
KL-III HEP
Marsyangdi HEP
Dharapani
Kudi
Kritipur
Udipur
Dana
Dada Khet
Rahughat
Kusma
Lower Modi HEP
Modi HEP
New Modi
Lahachwok
Upper Marsangdi-A HEP
Mid. Marsyangdi HEP
Pokhara
Biruta
Lekhnath
Syangja
Damauli
Ridi
KG-A HEP
Markhi Chowk
Sardi (Hongsi Cement)
From Tanakpur
Mahendranagar
Chameliya HEP
Nalsing Gadh
Bafikot
Jumla
Syaule
Attariya
Kalikot
Madichaur
Pahalmanpur
Dailekh
Jhimruk HEP
Burtibang
Paudi Amrai
Tamghash
Sandikharka
Lamki
Surkhet
Hapure
Ghorahi
Bhurigaon
Kusum
Lamahi
Shivapur
Motipur
Butwal
Sunawal
Kohalpur
Mainahiya
Hakkui
Nepalgunj
Nanpara (India)
Sampatiya (India)
New Butwal
Dumkibas
Kawasoti
Bardghat
Dhaubadi
Gaidakot
Gandak
Gandak HEP
Gorakhpur
From Balmikinagar
Meghauli
(New & Old Bharatpur)
Purbi Chitawan
(New & Old Hetauda)
Amlekhgunj
Kamane
Nijgadh
Auraha
Simra
Pokhariya
Parwanipur
Birgunj
Parsauni
From Raxual
Harniya
Pathlaiya
Cha-pur
Nawalpur
Sukhdev chauk
Salimpur
Dhalkebar
From Muzzaffarpur
Tingla
Mirchaiya
Balganga
Loharpatti
Lahan
Sukhipur
Rupani
Bodebarsain
South Corridor
Sitalpati
Tumlingtar
Dhungesangu
Kabeli
Kabeli HEP
Baneshwor
Basantapur
Phidim
Mai Khola
Puwa HEP
Mai Cascade
Inaruwa
Dharan
Godak
Damak
Anarmani
Keraun
New Anarmani
Kushaha
Duhabi
Biratnagar
Multifuel DP
From Kataiya

NEPAL ELECTRICITY AUTHORITY

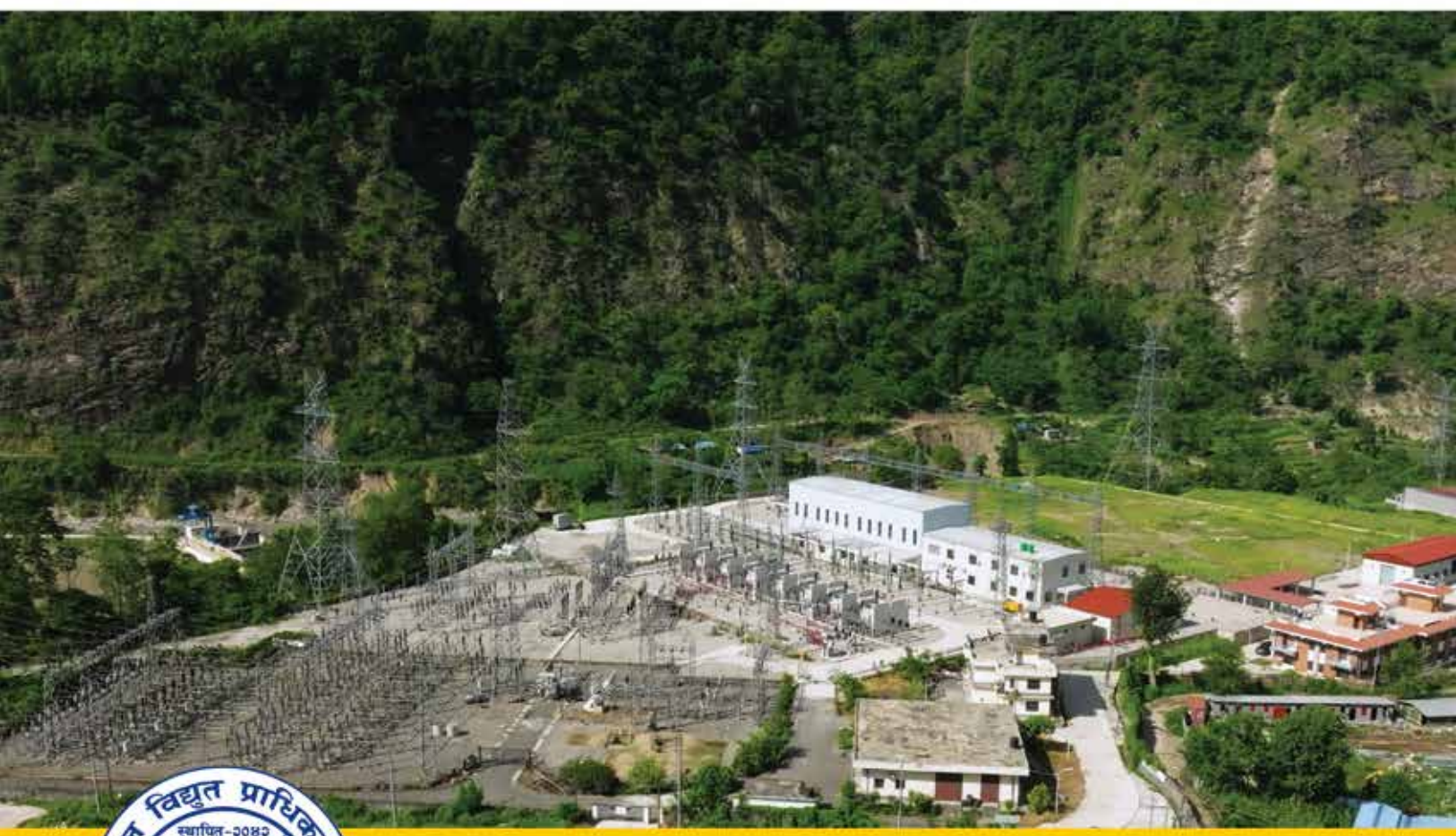
TRANSMISSION DIRECTORATE

MEDIUM VOLTAGE GRID DEVELOPMENT DEVELOPMENT

(Revised Date: JULY 2025)

Tripartite Power Trade Agreement among Nepal, India and Bangladesh

Middle Bhotekoshi Dam Site



NEPAL ELECTRICITY AUTHORITY

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