



REVIEW OF

ELECTRICITY BILL 2020



SAMRIDDHI
FOUNDATION

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BACKGROUND



Nepal's transition to electricity generation can be traced back to 1911 A.D. with the construction of Pharping Hydropower Station. Since then, hydropower projects in Nepal have been constructed through bilateral and multilateral support as the government prioritized hydroelectricity infrastructure development through its periodic development plans and legislations. The central bank has mandated commercial banks of the country to lend at least 10 percent of their lending portfolio to the energy. Similarly, the government is determined to be energy efficient as its commitment to Nationally Determined Contributions (NDCs) to adopt low-carbon development pathway and address the issue of inefficient use of energy in the country (Nepal Energy Efficiency Programme 2020). For this purpose, the government has adopted the National Energy Efficiency Strategy.

The Constitution of Nepal, in Article 51(f) Clause 3, mentions ensuring reliable and affordable energy supply and proper utilization of energy by generation and development of renewable energy for the fulfillment of citizen's basic needs. Nepal needs sufficient energy supply to achieve this goal. The National Energy Efficiency Strategy, 2018 discloses that the country has been facing complex but mutually interrelated energy challenges, such as, nearly one fourth of the total population still being outside the reach of modern energy sources; a wide gap between energy demand and supply; supply vulnerability and reduction in foreign currency reserves due to existing dependence on energy import. The strategy reveals that approximately 7.5

million people are outside the reach of modern energy sources which shows a wide gap between energy demand and supply within the country. Similarly, with the country aiming to achieve the sustainable development goals set by the United Nations by 2030, Nepal is set to achieve the goal of ensuring access of affordable, reliable, sustainable and modern energy for all by promoting sustainable and accountable production and use. By 2030, Nepal envisions to obtain the objective of increasing the proportion of population with access to electricity to 99 p.c., installed capacity of hydropower to 15000 Megawatt and electricity consumption to 1500 KWh per capita.

The bottom-up¹ estimated investment of USD 23 to 36 billion in different mixes of run-of-the river and storage projects is required by 2030 to meet the universal energy access target of 13000 MW, to complete the projects in the pipeline of up to 15000 MW, and meet the maximum demand of electricity forecast of 18000 MW for 2030 (Confederation of Nepalese Industries and Institute for Integrated Development Studies 2019). Previously, the electricity projects were either owned by the unitary government or private party (domestic or foreign investor), but with the advent of the constitution that mandates authority of the subnational governments to administer their own electricity projects, a wholesome electricity legislation that takes on the spirit of sustainable federalism as well as ensures the availability of affordable and consistent energy was necessary. Likewise, considering the targets to be achieved and the varying hydropower potential of the provinces, it was essential to adopt a new legislation that helped establish a structure where the subnational governments could develop their own energy projects so that the set targets could be achieved.

In pursuit to achieve such aspirations, the Ministry of Energy, Water Resources and Irrigation has registered the Electricity Bill, 2020 in the National Assembly. The bill has been put forward with the objective of distributing the rights and responsibilities among the federal institutions for developing

1 The bottom-up method estimates the need of investment in the selected infrastructure sectors on the basis for demand for relevant end-use services.

and implementing electricity development projects. Also, with the view of making electricity accessible to every citizen of the country, the Bill attempts to enhance the electricity development projects through a competitive model to fulfill the growing demand for energy in the country.

PROSPECT AND CHALLENGES



It is estimated that the power demand within the country will double by 2025 (International Hydropower Association 2019) and the Electricity Bill has been put forward with the objective of making electricity accessible for every citizen of the country. The Bill was brought forward mainly with the objective of fulfilling the need of a legislation that distributes the rights and responsibilities among the federal institutions and creates coordination among them in regards to electricity development projects. As the previous legislations were formed before the country was a federal republic, this Bill aims to decentralize development, operation and licensing authority among subnational governments in regards to electricity development.

The Electricity Bill holds great prospects for electricity development in the country however, it also misses out on certain provisions that can be a challenge for electricity development under the federal structure. Such prospects and challenges for the bill are briefly discussed in the sections below.

PROSPECTS

As mentioned in Section 3 of the Bill, all three tiers of governments can develop and operate projects based on the production capacity of the project. The local governments have been provided authority to develop and operate projects with capacity up to 3 Mega Watts, the provincial governments with

production capacity ranging from 3 Mega Watt to 20 Mega Watts while the authority lies with the federal government regarding projects above 20 Mega Watts. Likewise, Section 11 of the Bill provides rights to grant license to each tier of government based on the proposed capacity of hydro plant.

Production Capacity	Authority to Grant License
Up to 3 MW	Respective Local Government
3 MW to 20 MW	Respective Provincial Government
Up to 3 MW using two or more rivers or inter- local level in nature	Respective Provincial Government
Up to 20 MW using two or more rivers or inter-provincial in nature	Secretary of Ministry of Energy, Water Resources and Irrigation
More than 20 MW and excluding above provisions	Secretary of Ministry of Energy, Water Resources and Irrigation

Note: The local and provincial level will provide license based on their respective laws. If the local and provincial laws are not yet prepared, the Ministry of Energy, Water Resources and Irrigation can use its right to grant licenses.

The Electricity Bill has a separate section (Section 5) for rural electrification and maintains that rural electrification process can be initiated with individual or coordinated action of all three tiers of governments. By maintaining a sole provision for rural electrification, the Bill has granted authority to subnational governments to initiate their own electricity development projects as per their need. For this purpose, the subnational governments can request technical support from the federal government and are even allowed to use the electricity royalty received.

The Electricity Bill, 2020 positions itself as a revised Bill based on the previous experiences and learnings. The Hydropower Development Policy, 2001 had maintained a provision of granting one generation license term for hydropower projects based on the nature of the projects. Projects supplying

for internal demand were granted license for a term of 35 years while export oriented projects were granted for 30 years. The new Bill, however, prescribes a maximum license period of 50 years. To that extent a one-time 35-year license is granted in the first instance which is then renewed for 15 years, for projects generating electricity through dams and 40 years for projects without the use of dams. Similarly, the Bill ensures a competitive model for granting licenses to all electricity projects. However, according to the Directive related with the License of Electricity Projects, provision for competitive bidding is limited to projects included in the project bank.

Shrestha (2017) argues that the previous legislations lacked a mechanism to ensure that the applicant had access to necessary resources to implement the project. This deprived genuine investors of potential sites and blocked generation of electricity. Similarly, the rent-seeking attitude of the license holders without financial strength had also deprived the national treasury of the royalty revenue, where the case would be different had the policy made better provision to screen applicants' financial capabilities to implement a project. By ensuring fair competition in the process of acquiring license as well as maintaining provisions to limit license to each institution for individual task, the Bill makes room for electricity generation at a minimum cost and ensures that a competent developer can be selected for the project.

Though the Electricity Bill, 2020 has been revised to address concerns not imagined by the previous legislations, there still needs some changes in the current Electricity Bill. A brief comparison of previous hydro power legislations with Electricity Bill 2020 in terms of investment prospects has been shown below:

COMPARISON OF ELECTRICITY BILL 2020 WITH THE ELECTRICITY ACT 1992 AND HYDROPOWER DEVELOPMENT POLICY 2001

Items	Electricity Act 1992	Hydropower Development Policy 2001	Electricity Bill 2020
Validity of License	<ul style="list-style-type: none"> • Survey of Electricity: 5 years • Generation, transmission or distribution: 50 years 	<ul style="list-style-type: none"> • Survey of Electricity: 5 years • Generation license: <ul style="list-style-type: none"> • 35 years for project supplying internal demand • 30 years for export-oriented hydro power project • Distribution and Transmission: 25 years 	<ul style="list-style-type: none"> • Electricity generation through dams: 50 years • Electricity generation without the use of dams: 40 years • Other manners of electricity generation: 25 years • Transmission, distribution and trade: 25 years² • Customer Service: 5 years

2 The license term for transmission and distribution has not been revised, and is limited to 25 years as was the case provisioned in Hydropower Development Policy of 2001; but the Bill mentions that transmission and distribution licenses can be renewed for additional 25 years.

Royalty	Rs 100/KW per annum and 2% of average tariff per unit/KW for 15 years from the date of generation of electricity for commercial purpose	<ul style="list-style-type: none"> For internal consumption: NRs 100-200/KW per annum and 1.75-2% of average sale for 15 years. NRs 1000-1500/KW per annum and 10 % of sales after 15 years For Export-oriented hydropower project: NRs 400-500/KW per annum and 7.5-10% of average sale for 15 years. NRs 1800-2000/KW per annum and 12-15% of average sale after 15 years. 	Yet to be decided
Income Tax Concessions	<ul style="list-style-type: none"> No income tax to be levied up to 1000 KW Income tax exemption up to 15 years for license holder for generation, transmission and distribution of electricity for commercial purpose.³ 	<ul style="list-style-type: none"> Income tax payable shall be as per the prevailing Income Tax Act. 	<ul style="list-style-type: none"> Does not have provision for providing income tax concessions to producers.

3 Removed from the Act through an amendment. Concessions are specifically provided by Income Tax Act now.

Customs/ Sales Tax Concessions	<ul style="list-style-type: none"> • 1 p.c. customs duties to be levied for the import of materials not produced in Nepal and no charge for sales tax shall be levied for such imports. 	<ul style="list-style-type: none"> • 1 p.c. customs duty to be imposed. 	<ul style="list-style-type: none"> • Does not have provision for providing concessions regarding VAT⁴.
Land	<ul style="list-style-type: none"> • Land acquisition shall be as per the Land Acquisition Act, 1977. • In terms of government land, such land may be leased for the period up to the term of license. 	<ul style="list-style-type: none"> • Land acquisition shall be as per the Land Acquisition Act, 1977. • In terms of government land, it may be leased for the period up to the term of license. 	<ul style="list-style-type: none"> • Land acquisition shall be as per the Land Acquisition Act, 1977 that has been amended as per the need of federalism. However, the subnational governments are not given authority to acquire lands. • In case of government land, it may be leased as per the prevailing laws or any other way possible.

One Window Policy	<ul style="list-style-type: none"> Does not hold provision for one window policy. 	<ul style="list-style-type: none"> Department of Electricity Development will be providing the service. 	<ul style="list-style-type: none"> Does not have provision for one window policy.⁵
Cost of Resettlement	<ul style="list-style-type: none"> The government or the developer shall pay for the losses incurred to the property owner. 	<ul style="list-style-type: none"> Developers bear cost of resettlement. 	Developers bear the cost of resettlement.
Cost of Security	Developers bear cost of security.	Developers bear cost of security.	Developers bear cost of security.

CHALLENGES

Electricity Bill, despite being a revision of the previous electricity legislations of the country, faces certain challenges. Below, the challenges in the proposed bill have been identified and looked strictly from a federal lens. Few other issues not addressed by the Bill have also been mentioned.

Challenges for licensing fee:

Section 3 of the Electricity Bill provides local and provincial governments to authorize electricity projects up to 3 MW and 20 MW respectively, while Section 11 allows the subnational governments to issue development and generation licenses for the said capacities. However, the Bill does not mention

5 However, the Public-Private Partnership and Investment Act mentions that a one stop solution shall be provided for the investments.

whether the subnational governments are allowed to charge licensing fees. In Canada, as per the articles 109 and 117 of the Constitutional Law, provinces are the owners of the natural resources that are located in their territories and hold exclusive legislative powers for the management of the natural resources that are found in their territories. In case of hydropower sector, provinces have ability to impose rights on water use and electricity production using licenses and royalties (Pineau, Tranchecoste and Cardenas 2017).

Challenges regarding inter-jurisdictional water streams:

The Bill does not hold provision regarding the licensing authority of provincial and local governments in terms of river systems that are inter-jurisdictional in nature. The Bill gives such authority to the Secretary of Ministry of Energy, Water Resources and Irrigation in cases of shared water resources between provinces and to the respective province in cases of shared resource among local levels. However, withholding the authority of subnational governments in cases of shared water streams reveal the reluctance of federal government and its lack of confidence in subnational governments to co-ordinate and solve inter-jurisdictional issues regarding shared resources.

Conflicts with other legislations:

- *Regarding Land Acquisition:*

Section 36(1) of the Bill mentions that the project developer, if needs to use or acquire land for the purpose of project development, shall write to the Nepal Government for their assistance. Likewise, Section 36(2) mentions that the Nepal Government can acquire the land for the purpose of project development if the call for assistance holds true. For this purpose, the project developer must pay compensation to the land owner. Meanwhile, the Section 39 of the Provincial Public Private Partnership Act of Province 1 mentions that the provincial governments can acquire land for the purpose of development for which the project developers are required to provide a written application to the Provincial government.

However, the proposed Electricity Bill does not mention the rights and duties of provincial governments in terms of acquiring land. Furthermore, land rights are yet to be transferred to the provincial governments from the federal government because as per Section 3(a) of the Land Acquisition Act, the provincial governments are also required to write to the federal government if a specific land is to be acquired.

- *Regarding Royalty Collection:*

Section 31(1) of the Electricity Bill, 2020 holds provision of paying royalty to Nepal Government and does not mention whether the provincial or local government can collect royalties from the electricity development projects. The Bill also fails to mention the royalty rate that has to be paid to the federal government. However, the Electricity Act of Province 1 in Section 16 mentions that the provincial government can collect royalty as per the stipulated rate from the projects being developed under its jurisdiction.

Canada, a country that produces 10 p.c. of the world's hydropower, grants exclusive powers to the provinces for the management of hydropower sector that falls within their territory. Different provinces in Canada have differing royalty rates. For instance, the federal government and the province of Newfoundland and Labrador have a fixed annual rate, Quebec charges inflation adjusted Can\$3.852/MWh, British Columbia charges hydropower royalties based on storage capacity of the station and royalty based on electricity generation and capacity and if the dam is on crown lands, there is royalty payment due for the permit over crown land occupied by a dam. New Brunswick and Alberta do not charge hydropower royalty where hydropower production remains relatively small (Pineau, Tranchecoste and Cardenas 2017).

- *Regarding Survey Licenses:*

The Electricity Bill 2020, attempts to devolve power to the subnational governments regarding hydro power development in the

country by provisioning their rights and authorities in the Bill. The Bill, rather than the old provision of granting survey licenses, has put forward the idea of granting projects through competitive bidding i.e., the project survey will be conducted by the government and project developers will be granted licenses for project development. This means that the subnational governments are not allowed to provide survey licenses for conducting surveys. However, Section 7 of the Electricity Act of Province 1 and Section 8 of the Water Resources Act mentions that any institution or individual wanting to conduct survey shall apply for a survey license creating a conflict between the provisions of the legislations.

- ***Challenges Regarding Transfer of Ownership:***

The Electricity Bill, 2020 in Section 17 has mentioned that the ownership of electricity infrastructure shall be transferred to Nepal Government or any institution that will be stated by the Nepal Government after the end of the license term. Here, the local and provincial governments are given authority to provide licenses for development of hydro projects but the transfer of ownership to Nepal Government will hamper the rights of the subnational governments. Since the subnational governments are given the authority to provide licenses, the ownership of the projects after license expiration must also be transferred to the respective governments as the Constitution in Schedule 6 and 8 grants power to provinces and local level regarding province level electricity and local level electricity respectively.

Challenges of administration:

The Electricity Bill, 2020 does not mention whether the subnational governments are provided the autonomy of determining the fees and concessions for other charges that may arrive or prevail for the developers. Energy sector has been listed as the priority sector for the country meaning

the country has placed utmost importance for the sector's development. The Electricity Act, 1992 and the Hydro Development Policy 2001 included provisions of tax concessions for the developers whereas the Electricity bill lacks provision on the same.

Conflict of primordial nature:

The Bill provides right to the local and provincial governments to provide license, develop and operate hydro-electricity projects up to 3 MW and 20 MW respectively. However, putting a cap on the license to be provided maintains a conflict of primordial nature for the federal government. Since the Bill holds the objective of devolving authority regarding the hydropower projects to subnational governments, keeping a limit on the capacity of the project restricts in fulfilling the objective of the Bill.

Likewise, the Bill also fails to devolve authority to the subnational governments in terms of granting licenses for transmission, distribution, and customer services. Electricity Bill provides authority to subnational governments only in terms of project development and generation licenses. The Bill, in Section 11 (1e), mentions that the Ministry of Energy, Water Resources and Irrigation is given authority for granting license regarding transmission, distribution, trade and customer service which yet again discloses that the government is not yet ready to devolve the authority.

Other challenges

Besides above-mentioned challenges, the Electricity Bill includes challenges as listed below:

- The Bill very faintly talks about the alternative sources of energy. The Bill seems to be a blanket legislation only for electricity generation projects that make the use of water resources. The Bill's failing to recognize the growing opportunities present in the alternative energy sources could prove to be problematic for provinces with low hydro electricity generation capacity. Likewise, the Bill's lack of acknowledgement of

Alternative Energy Promotion Centre (AEPCC) that promotes the use of alternative energy technology for rural electrification may bring about issues in the development of alternative energy in the country. The AEPCC aims to develop commercially viable alternative energy industries and raising the living standard of rural people by giving emphasis to develop environment friendly Rural Energy Technologies and improving the capacity of local bodies in rural energy project planning, implementation, monitoring and evaluation.

- The proposed Electricity Bill holds provisions that provides the government and any government chosen institution a discretionary authority to award projects to a foreign developer without competition. Section 55 of the Bill mentions that the government or the institution chosen for electricity development by the government can make agreements with foreign developers without competition in cases of (a) projects that require huge investments, (b) Nepal lacks necessary technologies, skills and human resources for project development and, (c) the project helps in Nepal's economic development, employment generation, and contributes in minimization of trade deficit as well as balance of payment. While the Public Private Partnership and Investment Act, 2019 has stated such direct agreements (negotiations) may take place in case no investors bid on the project or in case an investor makes an unsolicited proposal⁶. It is of great importance to maintain transparency while granting direct contract awards to foreign developers to avoid any malpractices that may take place.
- The Electricity Bill also fails to incorporate projects that fall under the jurisdiction of Investment Board of Nepal. As per the Public Private Partnership and Investment Act, 2019, the projects having capacity of more than 200 MW shall be implemented by the Investment Board but the draft Bill fails to incorporate such projects.

⁶ Unsolicited Proposal means a proposal submitted by a proponent with an intention to develop a project in a situation where the concerned agency has not issued a public notice for inviting the proposal. (Public Private Partnership Act, 2019. S28.)

REFORMS



The Electricity Bill, 2020 will need to reform the following provisions in order to address the challenges.

- The provincial governments must be provided with the authority of granting licenses regarding the projects that are inter-jurisdictional in nature. For instance, in the United States of America, States that hold stakes in Delaware and Susquehanna river basin have established an inter-state compact with the federal support to address issues related to the inter-state basins. Likewise, similar arrangement with inter-state co-operation by support of federal government is seen in case of Murray-Darling river basin of Australia straddling across all Eastern states of the country. Anderson (2020) mentions that in India, the legislation has provided for the presence of interstate basin advisory boards but its absence in implementation resulted in a cumbersome interstate water disputes mechanism and its limited use.

In case of Nepal, such basin commissions to handle interprovincial disputes that may arise from projects established at interprovincial river networks may be established under Section 28 of the Federal, Province and Local Government Co-ordination and Interrelationship Act, 2020, Water and Energy Commission Secretariat (WECS), Steering Committee as provisioned in the Section 42 of the Electricity

Bill or other constitutional agencies such as Intergovernmental Fiscal Commission provisioned in Section 33 of the Inter-Governmental Fiscal Arrangement Act, 2017 or Inter Coordination and Facilitation Committee provisioned in Rule 16 of Inter Governmental Fiscal Arrangement Regulation, 2019 or by making amendments in the Water Resources Act, 1992 for matters that are inter-jurisdictional in nature.

Similarly, in areas of inter-local river network, the authority of local governments in regards to project within capacity of 3 MW may as well be preserved once an inter-provincial commission is formed. The jurisdictional issues arising at the local-level can be mediated by the Provincial Co-ordination Committee with representation of respective provincial government along with the representation from the concerned local governments. Allowing subnational authorities to address horizontal inter-jurisdictional issue is essential to sustain federalism in the country.

- The Electricity Bill, in order to achieve its objectives completely, must be revised to make provisions granting authority for the provincial and the local governments to charge licensing fees as the Constitution grants the subnational governments the power to charge fee for the services provided. Likewise, the Bill grants authority for the subnational governments to grant licenses so they must be allowed to charge fees for the services provided in order to remunerate their additional role of administering licensing duties.
- For the purpose of increasing efficiency in the development projects and devolving authority to the subnational governments, the Electricity Bill must make reforms to its Section 36 where only Nepal Government has been authorized to acquire land for project development. Likewise, Section 3(a) of Land Acquisition Act, 1977 must be amended so that the subnational governments can acquire land without taking the approval of the federal government. Since the

subnational governments hold authority to develop and implement their own projects as well as grant licenses regarding the electricity development projects, they must be authorized to acquire land within their own territory. Also, asking the federal government to acquire lands for the projects to be implemented will only add up to increasing project costs and duration for the developers.

- The provincial and local governments should be granted the authority to charge their own royalty rates. Though the Bill does not include the provision for that matter, it can be done in the regulations prepared based on the Act. Doing so will increase the competitiveness among the provincial and local governments ultimately increasing the benefits for the consumers as the electricity produced will be connected with the National Transmission Grid.
- The conflicting provisions regarding the transfer of ownership of the project, the selection of foreign developer and the authority regarding survey license present in the Electricity Bill need to be addressed promptly. If the Bill gets endorsed at its present state, the authority of the subnational governments for aforementioned instances will be void. The Electricity Bill, being the main legislation for electricity development in the country will be conflicting with the Provincial Electricity Act of Province 1, 2019, Public-Private Partnership and Investment Act, 2019, Public-Private Partnership Act of Province 1, 2019, and the Water Resources Act, 1992.
- To ensure healthy competition among the provinces, for an efficient development of the energy sector and also to achieve the goal set by the National Energy Efficiency Strategy, 2018, the Electricity Bill must establish provisions that allow the subnational governments to facilitate incentives for the developers. In India, each State is liable to provide incentive for the developers. In Arunachal Pradesh, the State government will facilitate the developers in obtaining subsidies, tax concessions, etc. provided by the Government of India as well as

provide Carbon Credit Benefit up to the extent of 50 p.c. Likewise, in the state of Gujarat, the developers of electricity projects up to 20 MW who generate electricity for self-consumption or sale to third party within the State may be exempted from payment of electricity duty.

CONCLUSION



The Electricity Bill, 2020 aims to fulfill the need of a national legislation in the energy sector of the country. It holds on to the spirit of the constitution and federalism with the aim of promoting efficiency and competition in the energy sector to ensure access of electricity and modern energy throughout the country. The Bill thus needs revision and addition of certain provisions so that it can well integrate legislations enacted prior to the registration of this bill and avoid establishing conflicting provisions that may create confusions on jurisdiction of federal institutions. In a similar manner, revisiting the Bill once again before its endorsement will help in establishing the Bill as a one stop legislation for the energy sector as a whole.

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