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**SUMMARY OF EXISTING GUIDELINES
AND REGULATIONS FOR
HYDROPOWER LICENSING IN NEPAL**

Prepared for

His Majesty's Government of Nepal
Ministry of Water Resources
Electricity Development Center

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1 Introduction

Beginning in the early 1990's, HMG/N adopted a policy of encouraging private investment in the electric power industry in Nepal, as a way to stimulate the development of Nepal's vast undeveloped hydropower potential. Legislation was passed to establish a mechanism for licensing private hydroelectric developments, as well as to protect the unique physical, biological, and social environment of Nepal. This report summarizes the current regulatory requirements related to developing hydroelectric projects in Nepal.

2 Electricity Regulation, 2050

These regulations were established in 1993, pursuant to Section 40 of the Electricity Act, 2049. The Electricity Act was passed to encourage the development of electrical generation facilities in Nepal, to provide better electrical service and economic development in Nepal, as well as to encourage development of power facilities for export of power to other countries. The Act also established the Electricity Development Center (EDC) within the Ministry of Water Resources (MOWR), which functions as the electricity development unit under the MOWR. EDC serves as the “one window” agency for the approval (licensing) of all hydropower development within Nepal by both domestic and foreign investors. The Electricity Regulations define the licensing process for hydroelectric projects, and specify the information that must be included in the application for license and associated filings. Licenses are required only for hydroelectric projects greater than 1,000 kW in capacity. For projects less than 1,000 kW, the developer is only required to file a notice with EDC/MOWR before starting construction. No licensing or notification requirements apply to projects less than 100 kW.

The two stages of licensing are the Survey License and the Production License (Figure 2-1). The Survey License allows the Licensee to investigate a specific hydroelectric site for a period specified by the license (maximum of five years). During the term of the Survey License, the Licensee has the sole right to study that site, without the possibility of another applicant filing a license application on the same site.

As stated in the Electricity Regulations, under the terms of a Survey License, the Licensee must

- ▶ Begin survey work within three months after the license issuance date
- ▶ Submit six-month progress reports to EDC during the term of the license
- ▶ Submit a report to EDC on the results of the investigations, within 30 days after the completion of studies under the license

Once the Licensee completes the studies under a Survey License and concludes that the Project is feasible, a Production License must be obtained for actual construction of the project (Figure 2-1). Under the Electricity Regulations, if a Production License is issued, the Licensee must

- ▶ Begin construction work within 12 months after the license issuance date
- ▶ Submit six-month progress reports to EDC until construction is completed
- ▶ Comply with any other requirements of the license throughout the term of the license

The Production License remains in effect throughout the operation of the project, with a maximum license term of 50 years. The license must be renewed one year prior to the expiration date of the original license. No other relicensing provisions, however, are described in the current regulations.

The Electricity Regulations spell out the overall process for applying for a Survey License and a Production License. Figures 2-2 and 2-3 illustrate the application review procedures under the current regulations, for both categories of licenses. The regulations, however, do not provide any guidelines or specifications for interagency consultations or public participation during the licensing phase, other than the 35-day public notice period provided under the Production License application process (Figure 2-3). License applications are required to contain an analysis of the environmental effects of the project, and a description of mitigative and enhancement measures proposed by the Applicant. The current environmental impact assessment (EIA) guidelines and environmental regulations provide a description of the environmental review and consultation process required for hydropower licensing in Nepal and describe the format for EIA documents.

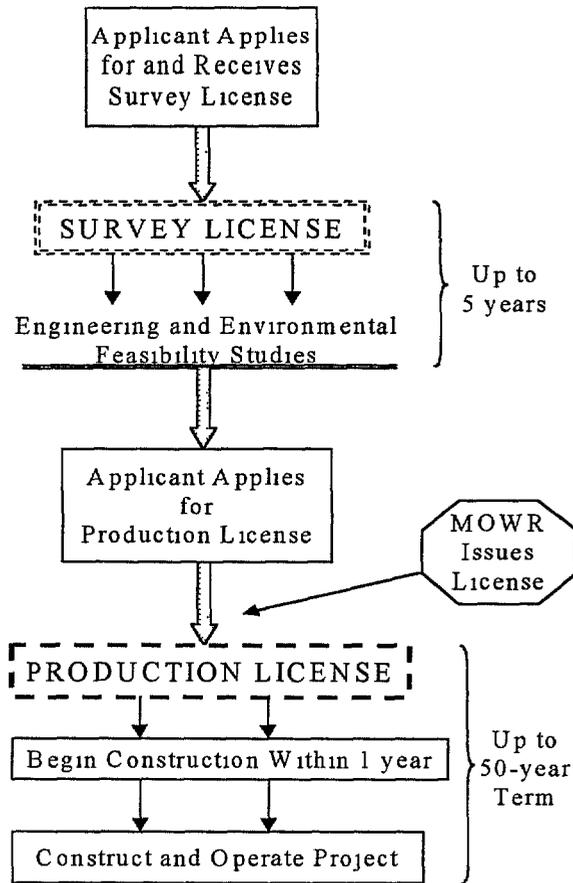


Figure 2-1 Hydroelectric Licensing Process in Nepal

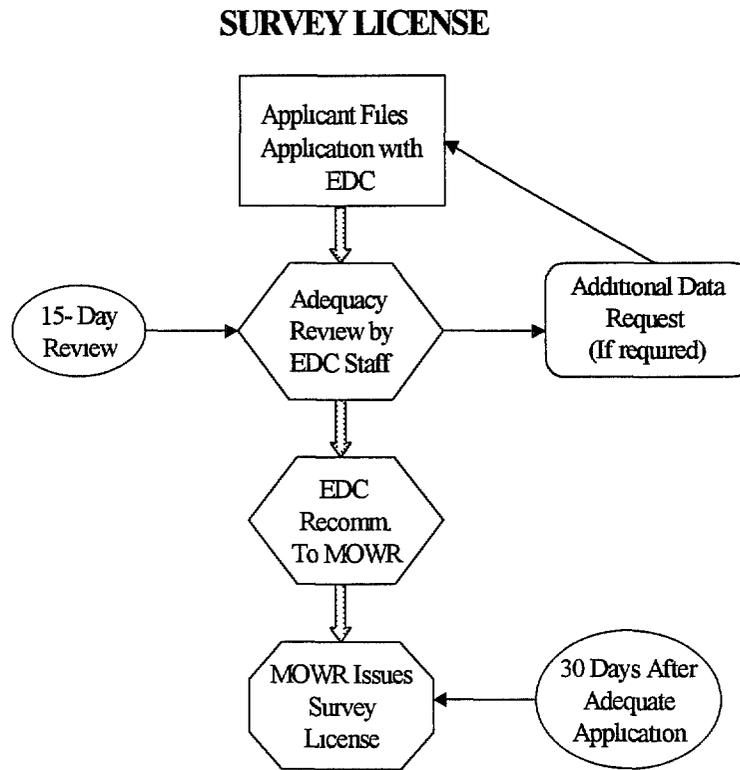


Figure 2-2 Survey License Application Process in Nepal

PRODUCTION LICENSE

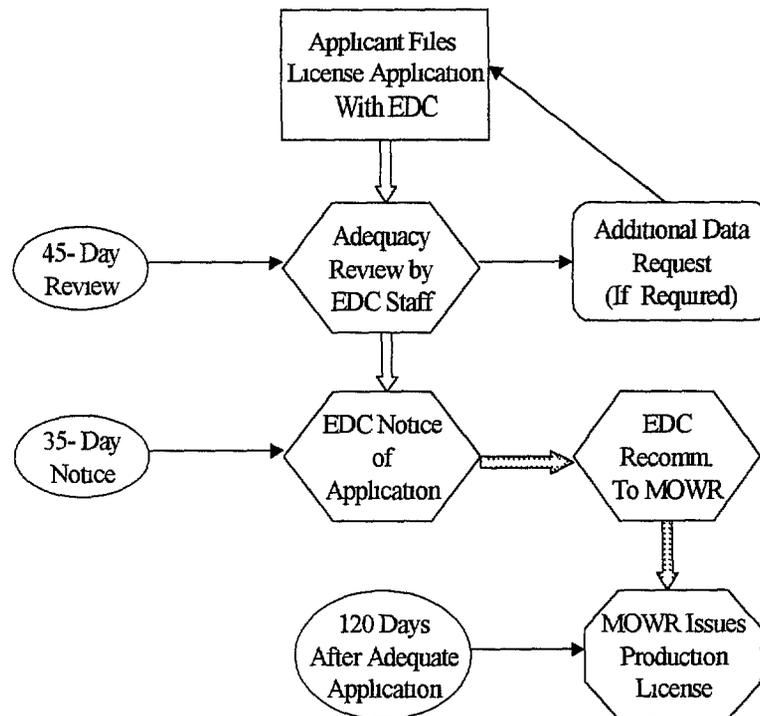


Figure 2-3 Production License Application Process in Nepal

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3 Environmental Impact Assessment Guidelines

Two major guidelines for conducting EIA's in Nepal have been issued in recent years. These are:

- (1) National Environmental Impact Assessment Guidelines, published in 1993 by the National Planning Commission, HMG/N, in collaboration with IUCN – The World Conservation Union
- (2) Environmental Impact Assessment Guidelines for the Water Resource Sector, published in Final Draft in 1994 by the National Planning Commission and Ministry of Water Resources, HMG/N, in collaboration with IUCN – The World Conservation Union

The guidelines are similar in content, and spell out a relatively detailed process for conducting an environmental review of proposed development in Nepal using a two-tiered process of an Initial Environmental Examination (IEE) and the full EIA. Figure 3-1 illustrates the overall EIA process for hydropower development in Nepal. The following general criteria also apply, based on the capacity of the proposed project and the type of activity proposed:

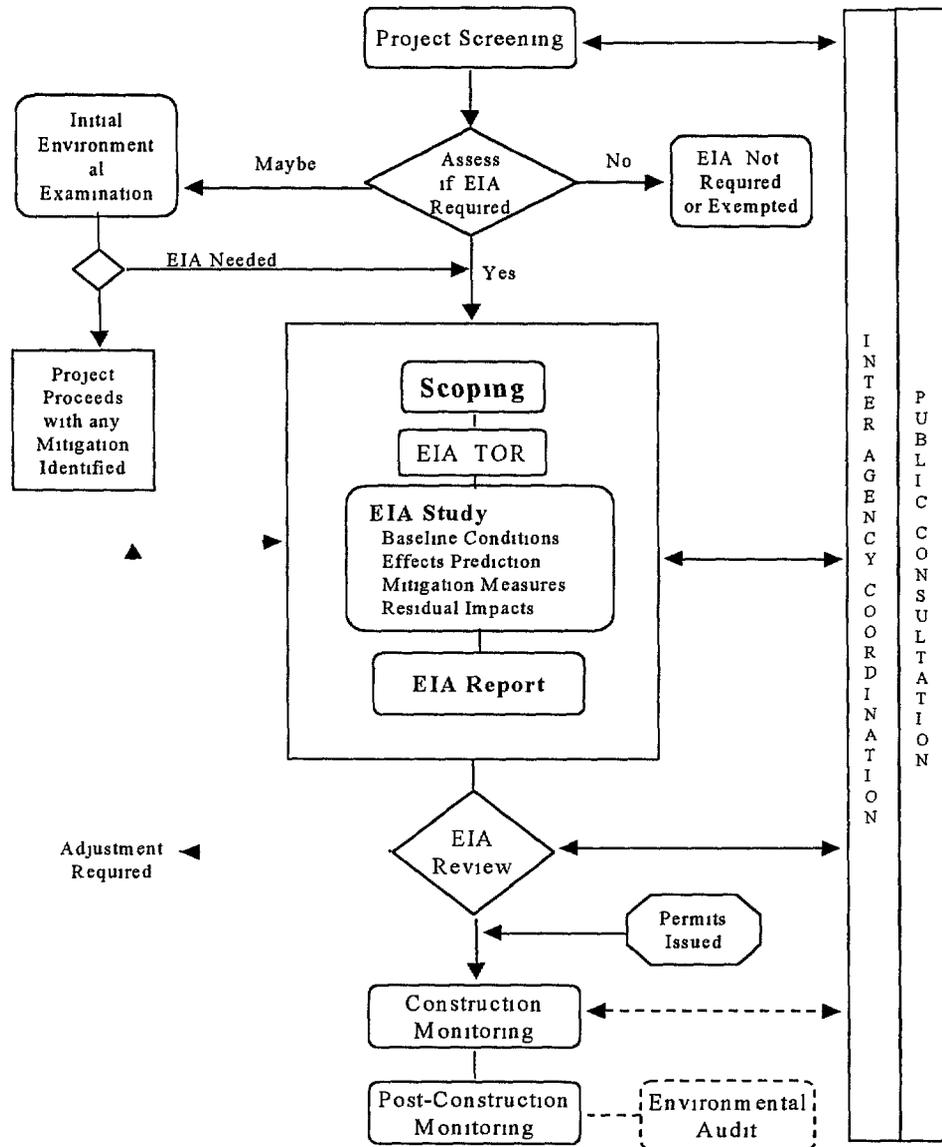
Type of Activity	No Requirement for IEE or EIA	Requires IEE	Requires Full EIA
Master Plan or Basin wide Studies	NA	Applies	NA
Feasibility Study Not Under License	Applies For Projects Up To 5.0 MW	Applies For Projects Greater Than 5.0 MW	NA
Feasibility Study/Detailed Design Under License	Applies For Projects Up To 1.0 MW	Applies For Projects From 1.0 to 5.0 MW	Applies For Projects Greater Than 5.0 MW

The Guidelines state that both interagency and public consultations should occur throughout the EIA process, and should begin as early as possible in the process (Figure 3-1). The stated advantages are that, for the public, their participation in the process will provide a sense of ownership, will allow for inclusion of traditional wisdom into the analysis, and may be valuable for rallying public support for the project. For government agencies, their participation in the process will provide early identification of significant environmental issues, which may be more easily mitigated through project design and planning. Early agency involvement will also allow the agencies to offer their specific expertise in designing mitigative measures, and will keep the agencies fully informed about a proposed project, avoiding any 'surprises' that may act to later erode agency support for the project. Another aspect of the agency consultation process that is recommended by the Guidelines, is scoping of the EIA studies to focus the studies on the most important, potentially significant issues. The ultimate objective of scoping is to produce Terms of Reference (TOR) for the EIA studies that are focussed on the important issues, and are acceptable to the government agencies and other interested groups.

Once the TOR are finalized, the Applicant will conduct the studies according to the TOR and prepare either an IEE or EIA report, depending on the scope of the project. Additional details of the IEE/EIA process are described in Section 4.

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Figure 3-1 EIA Process in Nepal
(EIA Guidelines, 1993)



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4 Environment Conservation Rules, 1997

These are the most recent national environmental regulations implemented in Nepal, having been officially published on September 7, 1997. These rules were implemented pursuant to Section 24 of the Environment Conservation Act, 2054 (1997). Similar to previous EIA guidelines, these new rules also set out a two-tiered environmental assessment process using the IEE and the EIA. These rules, however, apply to all types of potential development in Nepal, including forest management and utilization, industrial development, mining, road construction, water resources and energy development, tourism, drinking water supply, garbage management, and agriculture (which includes all types of food production, processing, and fish farming). Since these rules cover such a wide range of business sectors, they are somewhat general, and require some interpretation for applicability to the hydroelectric licensing process.

Figures 4-1 and 4-2 summarize the environmental approval process under the new rules. Comparison of these figures with Figure 3-1, the 1993 EIA Guidelines, indicates many similarities between the two processes. The categories of projects for which an IEE or EIA apply are also the same (as described in Section 3). An area where the 1997 Rules are more specific is the requirement for public notices and providing the public and other interested parties the opportunity to review draft IEE's or EIA's prior to their submittal to the regulatory agencies (EDC and Ministry of Population and Environment [MOPE]). Under the IEE process, the Applicant must issue a 30-day notice to local agencies and groups on the proposed project as the first step in the process. Later the Applicant must also provide the draft IEE to local groups for a 30-day review period, prior to filing the project application with EDC (Figure 4-1). Similarly, two public comment periods are provided within the EIA process (Figure 4-2). The Applicant is required to provide the draft EIA to interested parties, before filing the application. Under the EIA process, MOPE must approve the project, and will issue a public notice (30-day notice period) after it receives the application and final EIA. Under the new Rules, MOPE may also establish an interagency committee to review the EIA, before the final approval is given on the project.

The Environment Conservation Rules also include specific requirements for the post-licensing period. Once the Licensee begins construction, the licensing agency (EDC in the case of hydroelectric developments) must monitor the Licensee's compliance with license terms, and continually evaluate the ongoing mitigative measures (Figure 4-3). If the ongoing mitigation is considered to be inadequate, EDC may require the Licensee to implement additional measures. In addition, MOPE is charged with conducting its own evaluation of project impacts and mitigative measures, two years after the start of construction. Although it is not specifically stated in the Rules, the implication is that MOPE may also require additional mitigation if it believes that ongoing measures are insufficient. The rules do not specify any other consultations with other agencies during the post-licensing period.

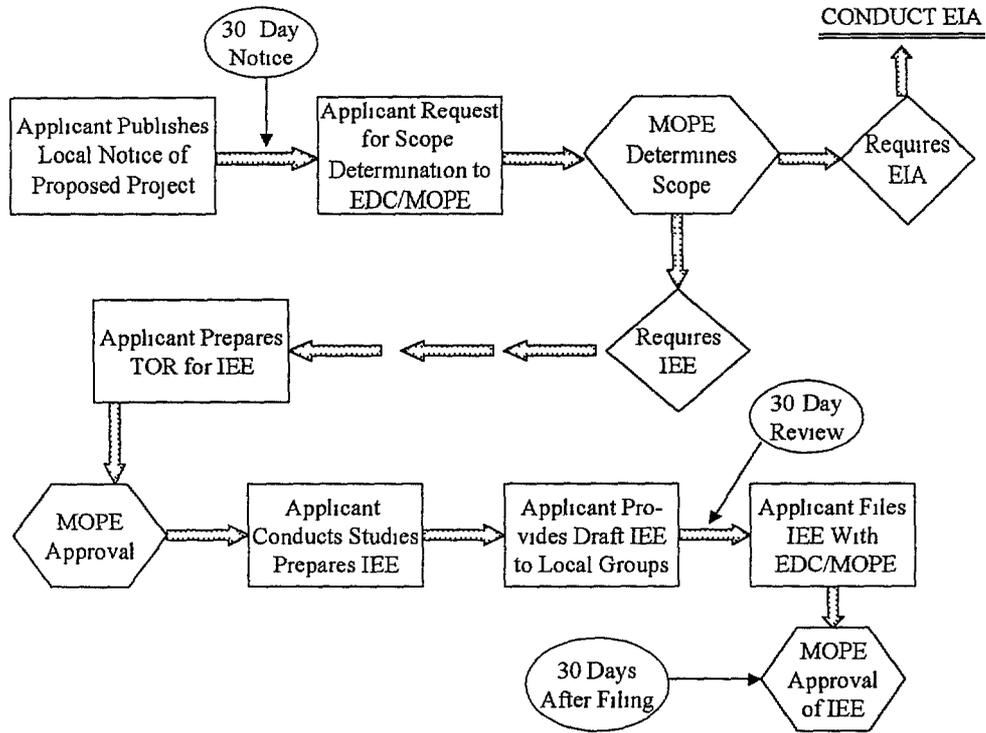


Figure 4-1 IEE Approval Process, Environment Conservation Rules, 1997

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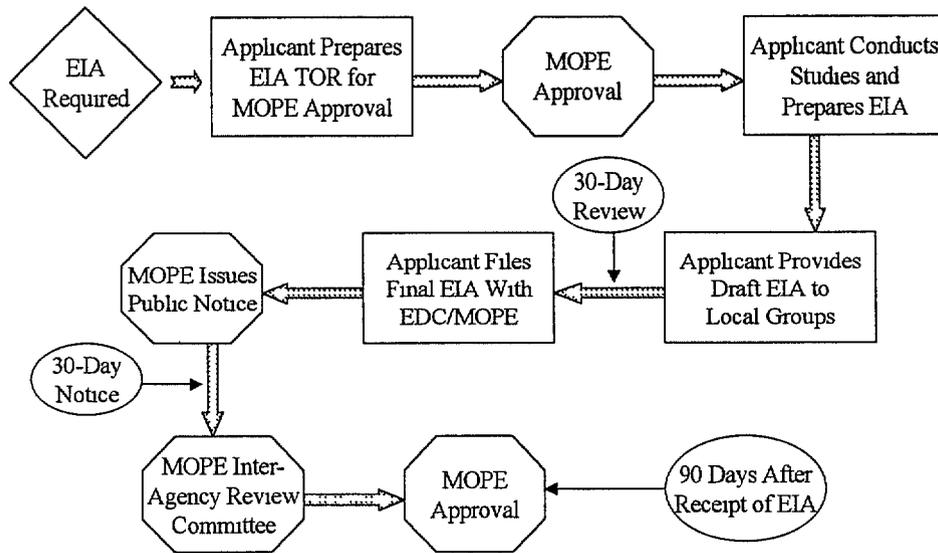


Figure 4-2 EIA Approval Process, Environment Conservation Rules, 1997

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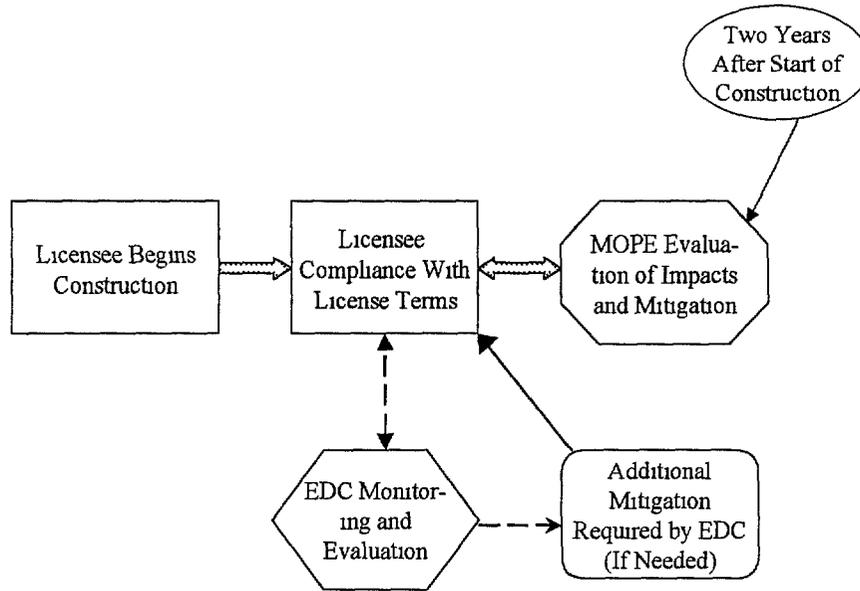


Figure 4-3 Post-Licensing Compliance Environment Conservation Rules 1997

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5 The World Bank Guidelines

The World Bank Guidelines for Environmental Assessment of Energy and Industry Projects have no legal mandate in Nepal, but may be applied as a review standard by The World Bank if The Bank becomes involved in project financing. These guidelines were issued in 1991, and have served as the basis for many other EIA guidelines prepared around the world. The Nepalese EIA guidelines prepared in 1993 and 1994, discussed in Section 3, are very similar to the World Bank Guidelines. Regarding interagency consultations, the World Bank Guidelines also stress that such consultations are very important in the EIA process, and recommend that they begin early, and continue throughout the process. The Guidelines provide some additional detail on the recommended structure for interagency consultations, including an initial scoping meeting, "mid-term" meetings and circulation of draft reports to the agencies for comment. Recommendations are also made for community involvement and consultation with NGO's, devoting an entire chapter to this subject. The following table generally summarizes the World Bank suggested process for interagency and community consultations, throughout the life of a project.

Table 5-1

The World Bank General Guidelines for Interagency Consultations

Project Stage	Consultation Step	Typical Duration (years)*
Initial Planning	Initial Information Meetings and Request for Comments	0.5
Pre feasibility Study	Begin EIA Scoping and Conduct Scoping Meeting(s)	0.5
Feasibility Study Begins	Select EIA Studies Conduct Further Meetings	0.5
Conduct EIA Studies/Feasibility Study Continues	Periodic Progress Meetings/Interim Reports	1.0 - 1.5
Prepare Draft/ Final EIA/Complete Feasibility Study	Draft EIA Issued for Comment/Review Meeting(s)	1.0
Licensing/Permitting	Public Notices/Further Community Meetings	0.5 - 1.0
Construction	Agency/Community Input to Ongoing Mitigation	5.0
Operation	Agency/Community Input to Ongoing Monitoring	30.0+

* Estimated duration for medium to large projects. Time intervals not based on specific project experience.

As noted above, these guidelines have no legal mandate in Nepal, but potential developers should be aware that these guidelines often serve as the "standard" to which the EIA process is compared.

6 Summary

This document has summarized the licensing and environmental requirements that potential hydropower developers will face if proposing a hydroelectric project in Nepal. The most time-consuming part of the regulatory procedures are those related to the analysis and documentation of the environmental impacts of the proposed project. Nepal's most recent environmental regulations are similar to those found in more developed countries, and should be followed in order to successfully complete a project. One of the most important aspects of the project environmental impact assessment review is the agency and public consultation program. Addressing social and environmental issues early in the project planning, and continuing throughout the process, will greatly enhance the probability that the project will be successfully completed. Developers are also encouraged to communicate regularly with EDC for assistance in proceeding through the regulatory process, and to employ personnel or consultants who have had experience with the Nepalese licensing and EIA process.

7 References

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