



# Post-PTA Indo-Nepal Power Trade

*SHER SINGH BHAT*

# History of Transaction of Power between Nepal and India

Duration	Purpose	Infrastructure	Bilateral Mechanism
Mid Sixties – Early Seventies	Electrification of Nepalese localities in the vicinity of joint river projects Kosi, Gandak.	Newly developed Local distribution lines.	Respective project coordination units
Mid Seventies – Mid eighties	Electrification of Nepalese towns in Terai adjoining the Indian border.	A number of 11 kV & 33 kV Lines extended to Nepal from India.	Secretary level meetings, JCWR.
Mid eighties- Nineties	Meeting Supply deficits in the areas supplied by INPS. Indian side also imported power from Nepal for adjoining border areas.	Kataiya – Kusaha Tanakpur – M.nagar Gandak - Blmknagr 132 kV lines	PEC
1 <sup>st</sup> Decade of 21 <sup>st</sup> Century	Purchase of Power from Indian short term market. Import by Indian side stopped, electricity declared import restricted item.	No new Infrastructure	PEC
2 <sup>nd</sup> Decade of 21 <sup>st</sup> Century	Synchronous operation of two grids and accessibility in each others market.	Completion of 400 k V D-M X-Border line.	PTA Signed

# DEVELOPMENTS AFTER ELECTRICITY ACT 1992

- ▶ Promulgation of EA 1992. Nepal's hydropower potential opened for private investment.
- ▶ FDI was expected for development of hydropower for domestic use as well as export purpose.
- ▶ But could not be strategic to embark Indian government investments in Nepal's hydropower and hence the Indian market remained inaccessible for Nepalese electricity.
- ▶ For this purpose a "Power Trade Agreement" was signed in 1997 which never came into effect.
- ▶ Indian Import Policy 2004-2009 declared electricity as import restricted item. A big shock to Nepal as doors of Indian market for Nepalese electricity were almost closed.
- ▶ Eighth meeting of Power Exchange Committee held in 2007 allowed Nepal to purchase power beyond PEC limit of 50 MW from Indian market at commercial principle. But it was silent about accessibility of Nepalese power into Indian market.
- ▶ Nepal continued importing electricity from India through prevailing infrastructure and bilateral mechanisms including that from short term market.
- ▶ However these imports by Nepal were in radial mode in absence of high capacity X-Border line and synchronous system integration.
- ▶ **Construction of 400 k V D-M Line initiated to meet these two infrastructure requirements.**

# GENESIS AND SIGNING OF PTA 2014

- ▶ **PTA signed in 1997 could not be effective as GON could not ratify it from Parliament.**
- ▶ **In 2010 Nepal sent a fresh draft of Power Trade Agreement to India.**
- ▶ In 2014, instead of a response to Nepalese draft, India sent their own draft of Power Cooperation Agreement which could not be consented by Nepal in the same format.
- ▶ Later a hybrid draft of two proposals as Power Trade Agreement was prepared, initialed, consented by both governments and finally signed on October 21, 2014.
- ▶ Indian side, from the very beginning preferred Indo-Nepal G2G cooperation in power generation, transmission, technology transfer and capacity building.
- ▶ But Nepalese side, through EA 1992, opened its Water resource for investment from any part of the world. No specific preference for cooperation with India at G2G level was initiated in policy and behavior.
- ▶ India has a large bearing on development of hydropower in Nepal. India is the nearest deemed market for Nepalese electricity.
- ▶ Absence of a mutually benefiting G2G cooperation with India regarding development of hydropower in Nepal remained as missing link to open Indian market for Nepalese hydropower.
- ▶ **Article 3 of 2014 PTA opens avenues for such cooperation and its implementation is much awaited.**

# MAJOR PROVISIONS OF POWER TRADE AGREEMENT

- ▶ **Mainly 4 articles**
  - ▶ **Article 2**
    - ▶ On connectivity, access in transmission system and harmonization of operation procedures
  - ▶ **Article 3**
    - ▶ On Investments
  - ▶ **Article 4**
    - ▶ On Removal of Tariff and Non-tariff barriers of trade
  - ▶ **Article 5**
    - ▶ On bilateral mechanisms for PTA operationalization

# MAJOR PROVISIONS OF POWER TRADE AGREEMENT

## ARTICLE 2: On connectivity, access in Transmission System and harmonized operational procedures

- (a) The Parties shall mutually work out a coordinated procedure for secure and reliable operation of the national grids interconnected through cross border transmission interconnection(s) and prepare scheduling, dispatch, energy accounting, settlement and procedures for cross-border power trade and unscheduled interchange.
  
- (b) The Parties shall allow non-discriminatory access to the cross - border interconnection (s) for all authorized/ licensed participants in the common electricity market.

# MAJOR PROVISIONS OF POWER TRADE AGREEMENT

## ARTICLE 3: On Investments

- (a) The Parties shall encourage and facilitate investments, including joint venture investments between the two countries, in power sector on mutually agreed terms in accordance with their laws in force to enhance the power trade.
- (b) The Parties shall take necessary measures to speed up interconnection planning and construction by inviting and facilitating governmental, public or private sector enterprises of the two countries.
- (c) The investments and related terms and conditions in developing specific cross-border transmission projects for power trade shall be governed by separate agreement(s) between the concerned entities on project to project basis.

# MAJOR PROVISIONS OF POWER TRADE AGREEMENT

## ▶ ARTICLE-4 On removal of Tariff and non-tariff Barriers of Trade

- (a) The Parties shall cooperate on the various aspects of policy harmonization for the realization of cross-border interconnections, grid connectivity and power trade. Both Parties shall work towards removing, and mutually resolving issues to, relating barriers, including tariff, levies, fees, taxes, duties or charges of similar effects, if any, in the cross-border exchange and trading of electricity.
- (b) The Parties shall allow the authorized / licensed electricity producers / buyers / traders of each country to engage in cross-border electricity trading, including that through Power Exchanges, and to seek cross-border transmission access **as per the laws of the respective country**.
- (c) The Parties shall facilitate the sale and purchase of electric power in respective countries depending on the potential to generate and demand of electricity as may be applicable.
- (d) The Parties shall put their best efforts to ensure unrestricted flow of power subject to safety, security, stability and reliability requirements of their power grids as per the applicable standards.



# MAJOR PROVISIONS OF POWER TRADE AGREEMENT

## ARTICLE-5: on Bilateral Mechanisms

- (a) The Parties shall set up a Joint Working Group co-chaired by Joint Secretaries of the Power/Energy Ministries of the two countries to promote and facilitate cooperation in the areas identified under this Agreement. The Joint Working Group shall take lead role for planning and identification of cross-border interconnections, selection of transmission technologies, preparation of Detailed Project Reports (DPRs), and modes of investment for timely implementation of projects, and preparation and finalization of operation and maintenance guidelines.
- (b) A Joint Steering Committee co-chaired by the Power/Energy Secretaries of the two countries shall be constituted to review the progress made by the Joint Working group. The Joint Working Group and the Steering Committee will meet at least twice a year and once a year respectively at mutually agreed venues.

# STATUS OF IMPLEMENTATION OF PTA

## ▶ Article 5: Bilateral Mechanisms

- ▶ Joint Steering Committee and Joint Working Group formed. Both JWG and JSTC had two meetings already. With the initiatives of JWG and JSC, Indo- Nepal Cross Border Transmission Master Plan is under preparation.
- ▶ Preparing DPR for the identified X-border TL, Technology selection, investment modality and O&M guide lines are yet to start.

## ▶ Article 4: Removal of Trade Barriers

- ▶ No visible progress is made on removing tariff and non-tariff barriers. Accessibility of Nepalese power in Indian market is yet not possible due to procedural hurdles and mandate of various institutions in India. No amendments are made in prevailing regulatory regimes to facilitate the power trade.
- ▶ Tariff regulation of long term purchases from Nepal, accessibility of Nepalese power in short term Indian market including exchanges are certain knots to be released.
- ▶ Instead of implementing Article 4(b) and 4(c) , India proposed state owned trader as nodal agency, which in the Nepalese understanding, might eclipse the spirit of PTA.

# STATUS OF IMPLEMENTATION OF PTA

## ▶ **Article 3: Interconnection Planning and Investments**

- ▶ Transmission interconnection planning is already initiated.
- ▶ Besides this no serious discussions are made on joint investments in power sector.

## ▶ **Article 2: Connectivity and harmonization of Operational Procedures**

- ▶ No progress on harmonization of operational procedures.
- ▶ Similarly no progress on developing guide lines on non-discriminatory open access in national domestic transmission systems as well as X- Border transmission system.

## DIRECT IMPACT ON TRADED VOLUME

- ▶ Despite the slow progress on full operationalization of PTA, there has been one positive development for which the environment created by PTA might get the credit.
  - ▶ Dhalkebar – Muzaffarpur 400 k V Cross border line construction is completed.
  - ▶ However due to slow progress on terminal substation on Nepal side, this line is temporarily charged at 132 k V. Nepal has started importing 80 MW power through this contingency arrangement.
  - ▶ Including this additional import, total import is about 320 MW whereas total domestic generation during dry months is only 350 MW.
  - ▶ This 80 MW import has greatly helped Nepal during critical dry months of the year. In absence of this additional import, load shedding might have touched 16 hours a day.
  - ▶ This may be acknowledged as direct benefit of PTA.
  - ▶ But however the accessibility of Nepalese hydropower in Indian market is still questionable.

## WHY SIGNIFICANT PROGRESS COULD NOT BE ATTAINED?

- ▶ It has already been one and a half year since the inking of the Agreement by the Parties but no significant progress is apparent on market opening.
- ▶ Although, formation of JWG and JSC and initiatives on preparation of X-Border Transmission System Master Plan may be taken with a positive note, but it is too slow to open the market.
- ▶ There are basically two levels of activities;
  - ▶ **Activities to be initiated and undertaken jointly through JWG and JSC. Such activities include:**
    - (a) Harmonization of policies, standards, codes, procedures and guide lines.
  - ▶ **Activities to be initiated and undertaken by Parties internally. Such activities include:**
    - (a) Amend internal regulatory provisions to facilitate the X-Border trade and remove barriers
    - (b) Establish new institutions or mandate prevailing national institutions for X-Border trade related issues,
    - (c) Establish open access procedures in the internal network as well as X- border transmission system.
    - (d) Preparing internally for X-border trade within the framework of PTA .

## WHAT GOT MISSED?

- ▶ Parties have initiated activities to be undertaken by JWG and JSC, though very slow.
- ▶ But there is no apparent internal home work for implementation of PTA and the activities to be undertaken by Parties internally seem to be left unattended.
- ▶ For example, in case of Nepal:
  - ▶ EA 1992 of Nepal does not recognize trading as business activity and there is no provision for trading license.
  - ▶ Similarly there is no provision of transmission open access in Nepali domestic network.
  - ▶ We do not have mechanism for wheeling charge and loss allocation .
  - ▶ There is a discriminated royalty rate for export projects.
- ▶ Similarly in case of India:
  - ▶ The Central Regulator (CERC) and State Regulators (SERCs) do not have mandate to regulate tariff of a power plant located outside the Indian territory.
  - ▶ There is no procedural clarity on how Nepal can have access to Indian long term and short term markets including Exchanges.
- ▶ This seems the main reason of slow progress.

# CONCLUSION

- ▶ PTA has not yielded as expected but the process is on and hopes are there. As of to day Market accessibility is not attained.
- ▶ There is an apprehensions in Nepal that recent provision of a state owned trader as nodal agency for trade does not commensurate with PTA and is perceived as one backward step by India. Let us be hopeful that this assumption will not prove to be true in future.
- ▶ For a speedy progress on implementation of PTA, both Parties should identify their internal “do list” on following issues:
  - ▶ Legal, Regulatory and procedural
  - ▶ Infrastructure
  - ▶ Institutional
- ▶ Similarly both Parties should jointly identify the “joint do list” to be performed jointly and complete it with definitive time line.
- ▶ Other wise PTA may not deliver as expected.



**THANKS**