CHAPTER III

PROFILE OF NEYVELI LIGNITE CORPORATION (NLC)
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NLC India Ltd (NLCIL) is an existing, profit making, public sector enterprise engaged in mining of lignite and generation of power through lignite based thermal power plants. It was established by Government of India in 1956, following the discovery of lignite deposits in Neyveli, Tamil Nadu. It is graded under administrative control of Ministry of Coal, Government of India and serves as an important source of power generation to the states of Tamil Nadu, Andhra Pradesh, Karnataka, Kerala, Telangana, Rajasthan and Union Territory of Puducherry. Today, NLC operates four opencast lignite mines with a combined capacity of 30.6 MTPA.

NLCIL’s thermal power station (the units under TPS-I) are South Asia’s first lignite fired and India’s first pithead based power station. From the lignite extracted from its mines, NLCIL operates in five thermal power stations with an aggregate capacity of 3,240 MW in the states of Tamil Nadu and Rajasthan. Apart from lignite based power plants, NLCIL also operates one coal based thermal power plant of 1,000 MW (2 X 500 MW) capacity through its joint venture with TANGEDCO, NLC Tamil Nadu Power Limited. It has also installed solar and wind based power plants.

This corporation has lined up a number of projects including expansion/augmentation of its existing mines and power plants, setting up of green-field mines & power plants, acquisition of power assets, acquisition of overseas mine assets, setting up of wind and solar power plants across the country. In 2012, NLC appointed ICRA Management Consulting Services Ltd (IMaCS) to develop a corporate plan for NLCIL till the end of 2020, covering the proposed projects envisaged at that point of time.

BUSINESS STRATEGIES OF NLC

India's economic growth in the last two decades has led to increased demand for power generation and its allied activities. During the same period, many of the Public Sector Undertakings (PSUs) have seen huge growth to cater to this demand by expanding their capacities as well as capabilities. Diversification has become a strategy for these PSUs to de-risk their existing business and to achieve organizational growth both organically and inorganically. NLCIL could also adopt some of the strategies
including vertical integration and horizontal diversification. A special case of global
diversification can also be assessed by NLCIL. The three forms are explained in detail
along with their applicability to NLCIL.

**Vertical Integration:** The presence in both fuel supply of lignite and generation
through lignite-based power plants has enabled NLCIL to achieve self-sufficiency in
operations and improved cost efficiency for its lignite based power plants. NLCIL may
also assess to undertake transmission and distribution activities to complete the value
chain of power business. NLCIL has also been allocated coal blocks in Talabhira II and
III and South Pachwara which shall enable the fuel sufficiency for the coal based
thermal power stations in Odisha and Uttar Pradesh respectively. NLCIL may also
explore forming Joint Ventures with power plant equipment manufacturers. The same
can help in faster implementation of power projects without any delay.

**Horizontal Diversification:** Horizontal diversification ideally represents
moving in to a new industry or new product segment. NLCIL has focussed on power
sector that can be a representative of different modes/ fuels like coal-based power,
lignite based power, wind farms, solar etc. In recent years, NLCIL has made a start in
setting up wind farms and solar plants. NLCIL has formed joint ventures with
TANGEDCO and UPRVUNL for setting up coal based thermal power plants in Tamil
Nadu and Uttar Pradesh respectively. NLCIL has successfully commissioned its first
carbon based thermal power plant in TamilNadu, which was implemented as a Joint
Venture with TANGEDCO.

NLCIL by acquiring industrial units/government undertaking in the power
sector have potential for profits after evaluating the synergies and risks pertaining to
the particular industrial unit/undertaking. NLCIL shall also provide consultancy
services on mine planning, power plant operations and maintenance, residual life
assessment, etc. to state run utilities to start with.

**STRENGTH, WEAKNESS, OPPORTUNITIES AND THREATS OF NLC.**

**Strengths**

NLCIL, operates the largest open cast mine in Asia and has a track record of
over 50 years in successful lignite mining. NLCIL has been operating lignite based
power plants for the past 40 years. Making use of the lignite mined from its mining
operations as fuel thereby improving efficiency of the power plants. NLCIL has a strong network of interconnected mines and power plants. NLCIL has implemented its first coal based power plant in a joint venture with Tamil Nadu state power utility (with the first unit commissioned in June 2015 and second unit in August 2015), in Tuticorin and has hence already started the process of diversifying its resource base.

NLCIL has implemented its first renewable energy based power plant (a 10 MW Solar power plant at Neyveli and a 43.5 MW Wind Power plant are commissioned so far). NLCIL currently has an external credit rating of AAA+ and is able to raise the funds at the lowest possible rates allowed for the Banks to fund the corporates. NLCIL has accumulated huge cash reserves through successful operations and the same has enabled NLCIL to invest in upcoming projects on its own.

Weakness

NLCIL is assessing development of new mine areas located in Neyveli which could have a lower stripping ratio and is looking at gradually phasing out the mines which become uneconomical over a period of time. The proposed power plants of NLCIL had undergone a delay in terms of implementation which is mainly attributable to delayed supplies of Specialized Mining Equipment (SME) and delayed supply and erection of main plant package of thermal projects. Since NLCIL is planning a pipeline of new and large projects across the country, it is necessary to take steps to ensure timely supplies and erection and commission in the future to avoid cost and time overruns with the incorporation of suitable clauses in the supplier’s contract.

Opportunities:

NLC has already acquired lignite mines in Rajasthan and plans to setup lignite based power plants in addition to the existing one at Barsingar to operate efficiently utilizing the lignite mined. The company has proposed plans to set up two 1980 MW coal based power plants (in Odisha Phase I &II and Ghatampur) and has been allocated coal blocks by Government of India for these projects. NLCIL can leverage their mining experience to ensure effective development of these coal mines and the same will enable NLCIL to acquire operational expertise with regards to coal based power plants. NLCIL plans to acquire coal mines in India to enhance the raw material reserves and enable diversification of fuel resources. The company has also an opportunity to
utilize its expertise in energy to provide energy, consultancy services to industry players such as state utilities those needed to improve the efficiency of their projects to save costs. NLCIL has already in the process of implementing renewable energy based power projects in wind and solar sector which will further diversify its generation base.

**Threats:**

NLCIL’s Board has given in principle approval for installation of Solar Power Projects to the tune of 3,400 MW, subject to techno-commercial viability, in various states and has already set up a 10 MW Solar and 43.5 MW Wind power plants. It has adopted cleaner and more efficient technologies for setting up of the proposed thermal plants. NLCIL has limited opportunity to grow its lignite reserves which is estimated at around 43 billion tons, of which 79.5 percent occur in the southern State of Tamil Nadu.

The lignite generated from the mines currently operated from NLCIL’s mines as their current operating efficiency may not be sufficient to meet the increased lignite requirement on account of capacity addition of lignite based plants and sales to Independent Power Producer TAQA and external parties.

NLCIL has to improve the efficiency of the mines and also synchronize the commissioning of the proposed new plants with the commissioning of proposed new mines/augmentation plans of existing mines. The increasing cost (both social and economic) of land acquisition may delay, the proposed projects of NLCIL and also impact the operating cost of power projects. Land acquisition for expansion is becoming difficult with legal petitions for enhanced compensation. NLCIL has implemented proactive measures like pre monsoon preparation and regular pumping of water which has minimized the impact on production. Increased competition from IPPs has resulted in highly competitive tariff, rates being quoted.

NLCIL will have to ensure operational efficiency so that it can compete with IPPs in tariff based bidding process and NLCIL has taken steps towards the same by implementing coal based power projects. NLCIL has also requested for exemption from competitive bidding route in specific cases and the same is under review.