

## **POWER BUDGET 2016-17**

1. If there is complete consensus across political parties, Government and civil society on any issue it is that the power sector can turn around the fortunes of the Government finances, put the State economy on a high and sustainable growth trajectory and make life easier for the people.
2. Not surprisingly, it has been the stated priority of all successive Governments. Yet, sadly, the power sector continues to be unexploited in terms of generations, archaic in terms of transmission, and inefficient in terms of distribution. The economic costs of this are very high and the financial burden is crippling the State and impairing its capacity to spend for the welfare of the people.

3. Why this is so is a long story; literally and metaphorically much water has flown down the Chenab and other rivers in the last 60 years. And the biggest regret will be that we have not been able to tap that resource for the benefit of our people. This is the simple but stark fact.
  
4. It is in recognition of the fact that the power sector development holds the key to the fiscal autonomy of the State, that a separate power budget is being presented. The core idea is to be able to address the issues of the sector with a greater clarity and focus, develop a framework and take steps to contain our fiscal deficit.

**TWIN DEFICITS: POWER & FISCAL**

5. As I just now stated, in the State budget, we have an unfunded gap of Rs 2,988 crore. The power deficit in financial terms is Rs 3,927 crore. In other words, if the power sector financials are taken care of, the State will not

have a budgetary gap. Indeed, it will be a surplus.

Speaker Sir, this should give you an idea of the criticality of the power sector to the finances of the State. Even worse is that despite incurring such losses, we are not able to provide adequate quantity and appropriate quality of power to our people.

6. The need to balance the bottom line of the State has to be seen in conjunction with the responsibility and commitment to providing 24x7 quality, reliable and affordable power to all our Domestic, Commercial and Industrial consumers. Our Government is committed to improving the quality of life of its citizens through higher electricity consumption. Our aim is to provide each household access to electricity, round the clock. This is a very challenging task.

## **POWER POSITION: DEMAND AND SUPPLY**

7. As of now, the State's peak demand for power has grown by over 8 per cent during the period from 2011 to 2015. Peak deficit has decreased from 28 per cent in FY12-13 to 23 per cent in FY15-16. High share of hydropower in the generation mix combined with outages in transmission and generation sources has led to seasonal variations in power availability situation in the State.
8. The State is energy deficient and has to rely on power purchases from Northern Region Grid to meet its requirements, especially during winters when demand peaks and own generation reduces drastically. As such, there remains a large gap between the requirement and availability of energy.
9. As per the estimates, the total restricted energy availability of power for the year

2014-15 remains to be 13,701 MUs against the unrestricted energy requirement of about 18,000 MUs.

10. As on date, total number 107 villages and 3.56 lakh households are un-electrified which are planned to be completely electrified by the end of 2018-19.
11. For bridging this gap, the 'Power for All' program is a major step. 24x7 Power for All (24x7 PFA) is a joint initiative of the Government of India and State Government, aiming to achieve 24X7 availability of reliable and quality power to all households, industrial, commercial and all other electricity consuming entities by the end of FY19.
12. Our Government has finalized the PFA Roadmap document in consultation with the Ministry of Power and its agencies like REC, CEA, PFC and BEE, highlighting all-encompassing power sector interventions

including generation, transmission, distribution, renewable energy and energy efficiency/DSM measures proposed to be implemented during FY16 to FY19.

13. The Government will continue to support the power sector through targeted capital subsidy schemes aimed at supporting the poor and marginal consumers and elimination of regional disparities in the State. 24X7 'Power for All' Program for the State will be implemented with the active support from the Government of India. An MoU in this regard shall be signed shortly with the Government of India.

**POWER PURCHASE, REVENUE REALISATION & TARIFF**

14. Last year, while presenting the Power Budget, I had drawn the attention of the house to the huge and accumulated gap between the

power purchase and actual revenue realization.

15. While there has definitely been a gradual increase in recovery since 1996-97, from Rs 54.33 crore to Rs 1937.27 crore, but it has not matched the increase in the cost of power purchase. The total power purchase liability on this account ended March 2016 was about Rs. 7000.00 crore, adding the surcharge burden of about Rs. 1260.00 crore per annum (at an average interest burden of about 18%).
16. I had announced debt restructuring by raising market borrowings for about Rs 7,000 crores in the form of power bonds to clear off our accumulated power liabilities. During the course of the year, Ministry of Power, Gol announced 'UDAY (Ujjwal Discom Assurance Yojana) Scheme with a similar intent.
17. As provided for under the Scheme, an MOU was signed by Power Development

Department with Government of India for raising a loan of Rs. 3537.55 crore, out of which Rs. 2140.00 crore has been lifted and Rs. 1397.55 crore is to be lifted during the current financial year. The balance power purchase liability shall be restructured by the State Government by issuing Bonds. Once the entire liability is so restructured, there would be a net saving of about Rs 700 crore on account of reduced interest/surcharge burden.

18. It is time to recognise that the losses incurred by the State every year on account of the difference between the purchase of power and the receipts from sale of power have two components. First, is the systemic inefficiency arising from poor infrastructure and organization. Second, is the implicit and hidden subsidy which is open ended and not even targeted.

19. Revenue realization is to be seen in the context of the T&D losses, tariff orders passed by the J&K SERC, subsidies allowed by the J&K SERC, billing and the collection efficiency.
20. To put it into indicative numbers, the average cost of supply is Rs 7.72 per unit. This includes the approved losses of 42.26 per cent. The average sale per unit is Rs 3.64. At the approved tariff, the average gap comes to Rs. 4.18 per unit. This Rs 4.18 “loss” per unit, or 54 per cent of the cost price per unit comprises of operational inefficiencies and a component of implicit subsidy which is neither directed nor targeted.
21. In other words, the reasons for this large and widening gap between power purchase bill and the revenue realization include low tariffs, high T&D losses, faulty meters, un-controlled and un-accounted consumption of power beyond the agreed load by

the consumers, unregistered connections, non-realization of revenue from non-camp temporary installations of Security Forces, migrant camps, public lighting by the Municipal Corporations/Committees and Government offices.

22. A broad indicator of the operational inefficiency is the magnitude of AT&C losses which is to the tune of 59 per cent in FY15-16. Abnormally high proportion of unmetered consumption is the primary cause for high AT&C losses in the State.
23. To deal with this issue, JKPDD has planned for 100 per cent metering for reduction in commercial losses. In addition to the commercial losses, technical losses in the systems are also very much on the higher side due to old/ overloaded lines and poor HT: LT ratio. The investment plan laid out by JKPDD is aimed towards reducing the HT:LT ratio which in turn would help in reduction of technical losses. JKPDD investment plans,

especially in the distribution and sub transmission sector, are targeted towards bringing AT&C losses to 15% by FY19-20. This is possible only through wide ranging power reforms.

## **POWER SECTOR REFORMS**

### **A) Unbundling:**

24. The Government in September 2012, ordered for unbundling of JKPDD and setting up of one transmission company, two distribution companies (one each for Kashmir and Jammu divisions) and one trading company with the function of a holding company.
25. Accordingly, four companies viz. a) Jammu & Kashmir State Power Transmission Company Limited b) Jammu & Kashmir State Power Trading Company Limited c) Jammu Power Distribution Company Limited and d) Kashmir Power Distribution Company Limited have been set up.

26. However, unbundling continues to be a work in progress as the newly formed companies are yet to take charge of their respective functions. Unbundling will ensure transparency and efficiencies in operation and reduce the costs with concomitant gains to the consumers. The Government is committed to taking the process of unbundling of the Department further without prejudicing the service conditions of any of the employees.

**B) Distribution Reforms:**

27. In terms of distribution reforms, the following schemes are presently underway at various stages of implementation in Jammu & Kashmir:

**Rural Electrification Schemes:**

**RRGVY and DDUGJY**

JKPDD's plans for extending the distribution network to rural areas are mainly covered

through works proposed under the RGGVY and DDUGJY schemes of Government of India. Out of the 6,337 villages in the State, 98.3% i.e. 6,231 villages have been electrified while 1.7% i.e. 108 villages are still un-electrified which are covered and sanctioned under DDUGY and RGGVY.

During the 12<sup>th</sup> Plan period, the fund layout for RGGVY of Rs. 101.28 crore for 25 un-electrified villages has been approved. Further, the State has proposed electrification of remaining villages under DDUGJY scheme covering 83 un-electrified villages with a fund layout of about Rs. 619.67 crore. The project is to be implemented by 2017-18.

**Urban Electrification Schemes:**

**Integrated Power Development Scheme (IPDS) and R-APDRP.** Under R-APDRP, 30 towns (19 in Kashmir & 11 in Jammu) with a population of above 10,000 as per 2001

census have been identified as project areas in the State. Gol has sanctioned Rs 191.25 crore for part-A and Rs 1,665.27 crore for part-B under the R-APDRP scheme on 90:10 funding. The State share shall be funded through State Capex Budget.

The DPR for SCADA / DMS for Srinagar and Jammu cities has been approved by Gol at an estimated cost of Rs. 52.89 crore. For execution of Part-B of the program, 2 cities and 28 towns have been divided into nine clusters, 4 in Jammu Division and 5 in Kashmir Division. The ground level implementation in the key cities has already commenced and shall be completed during the year 2016.

This will lead to significant improvement in quality of power in these towns, besides, helping in reduction of T&D and AT&C losses. The IPDS scheme covers 86 Statutory Towns under 12 circles. Detailed Project Reports (DPRs) totalling Rs.450.39 crore covering 12

circles have been formulated and scrutinized at a revised cost of Rs. 444.50 crore. The project is to be implemented by 2017-18.

### **PMRRP 2015**

28. The Government has approved an amount of about Rs 11400 crore under the Prime Minister's Relief and Reconstruction Programme for the Power sector in the State. PMRRP-2015 aims to strengthen Generation, Transmission and Distribution network with Advanced Technology Interventions including, construction of smart grids at Gulmarg, Pahalgam, Rangreth, Katra and Bari-Brahamana. Rs 2000 crore have been provided under the PMRRP for preparation of DPRs and implementation / execution of Small Hydel Projects. Similarly, Rs 4153 crore have been provided as the State equity towards Pakal Dul and other Hydro Electric Projects. Under augmentation of distribution system Rs 3790 crore have been earmarked

for Capital Cities, 4 Industrial Estates at Khonmoh, Lassipora, Samba and Kathua, Tourist Destinations, Heritage Sites and Important Places of Pilgrimage. Action Plan has been submitted to the Government of India and the projects will kick-start soon.

All these measures outlined above will reduce the Rs. 4.54 per unit gap by around Rs 2.00 per unit.

For the remaining part I am outlining a tariff plan.

#### **Rationalization of Tariff structure**

29. The last tariff hike in the State was in FY 2013-14 when it was raised by 8.5 per cent. Prior to that, in FY 11-12 it was increased by 15 per cent and in FY 12-13 by 19 per cent. The State Govt. has not increased any tariff for the last two years, while the average cost of supply has grown by about 7%.

30. Reasonable degree of tariff hike from time to time is required to meet the operating costs and to serve the economy with reliable power. The Government is taking steps to move towards tariff rationalization, identify the barriers in moving towards tariff rationalization and suitable ways to achieve tariff rationalization. Key measures in achieving these would be:
- i) By introducing efficient tariff design.*
  - ii) By including "Time of Day rate structure".*
  - iii) By administrative interventions, system improvement, and consumer metering.*
  - iv) By considering measures to reduce reactive energy.*
31. For Financial Year 2016-17, tariff petition has already been filed with State Electricity Regulatory Authority envisaging the

proposals on above lines. Without passing inefficiencies of the system to any category of consumer in the State, the JKPDD in its tariff petition before JKSERC has proposed to recover the prudent cost of supply from various categories of consumers as under:-

- i. *By bringing the high-end categories like State/Central Government Departments, Public Street Lighting, Public Water Works at par with the prudent cost of supply. The corresponding budgetary provisions shall be provided to respective departments.*
- ii. *By giving a reasonable tariff hike to the consumer categories like Domestic, Non-Domestic Agriculture and Industrial without any tariff shock to these categories. The remaining cost up to the prudent level is proposed be claimed as direct subsidy from the concerned*

*department for the respective categories.*

32. Accordingly the department filed tariff petition before the SERC for 13.5% hike in all categories except hike in State/Central departments, Public Street Lighting and Public Water Works to equal prudent cost of supply.
33. To ensure transparent accounting, bring efficiencies in the system and to appropriately target subsidies to various categories of consumers, covering the gap between the prudent cost of supply and the tariff proposed for various categories of consumers who are presently below the prudent level, the Government proposes to build in and provide direct subsidy to the consumer through the JKPDD.
34. This would ensure that the JKPDD graduates to a more transparent accounting system and the consumers, especially the vulnerable and

marginal, are insulated from sudden impact of tariff hikes from time to time. For the current Year, I propose to provide a subsidy of Rs. 1728.37 crore on this account.

35. The State Government under the Power Amnesty Scheme announced last year provided waiver of 100% surcharge on electricity charges with the stipulation that the domestic consumers make the outstanding payment by or before 31<sup>st</sup> March, 2016. However, the Government has received numerous representations that a substantial number of domestic consumers for various reasons could not avail the benefits of the Amnesty Scheme by or before 31<sup>st</sup> March, 2016. To facilitate such consumers enabling them to avail the benefits of the Amnesty Scheme, I propose to enhance the time limit for availing benefits under the Power Amnesty Scheme up to 31<sup>st</sup> December, 2016. It is hoped that all power consumers would have settled their

outstanding by that date and in future would pay the electricity bills in time.

### **GENERATION**

36. The long term objective of the Government is the development of the State's considerable hydro potential. The State's own installed generation capacity is 1,419.37 MW comprising of 1,110 MW of Hydro based Power Stations, 198 MW of thermal (Gas turbine) and 110.96 MW of SHPs.
  
37. The State owned plants contribute to 45% of the total energy requirement. Allocations from CGS contribute to the majority (53%) of the power supply and remaining (2.0%) is sourced from private sector projects. JKSDPC has drawn up a roadmap for systematic capacity addition in the 12<sup>th</sup>/13<sup>th</sup> Plan which is anticipated to make the State energy surplus by utilizing its large hydel potential. However timely DPR approvals/clearances, contracting, and works monitoring would be key to

ensuring timely commissioning of the proposed projects.

38. During the last FY, BHEP- II 450-MW was commissioned and has been inaugurated by Hon'ble Prime Minister. BHEP-I witnessed an all-time high record generation of 2953.37 MUs against Design Energy of 2536.07 MUs. LJHP also witnessed increase in generation to 661.236 MUs which is the highest generation figure since its takeover by JKSPDC from JKPDD in the year 1998-99.
39. The tunnel of Wangath link canal was successfully completed, tested and commissioned during 2015-16, paving way for operation of 3<sup>rd</sup> unit of 3x35 MW USHP-II. The damaged spillway and spill channel of the project has also been repaired. Major components of 9 MW Dah & 9 MW Hanu in Ladakh region have been completed during FY 2015-16 and the project is expected to be completed ending FY 2016-17. Further, 330

MW Kishanganga shall also be commissioned during Financial Year 2016-17 giving the State its 12% share from the total generation.

### **State Hydel Policy**

40. With the objective of attracting private investment in the development of hydropower projects, the State Government framed the State Hydel Policy in 2003. To make the policy more investor-friendly, new State Hydel Policy was announced in July, 2011 replacing the State Hydel Policy, 2003. Ten number of projects with an aggregate capacity of 110.5 MW were awarded to various Independent Power Producers (IPPs) through competitive bidding, out of which four projects with aggregate capacity of 42.5 MW have been constructed and are operational while remaining are at different stages of implementation. The Government would be removing the impediments to the investments by the IPPs in small hydel

projects by bringing in a more investor-friendly policy soon.

### **Repair Maintenance & Upgradation (RMU) Plan**

41. The machines of the old power houses have outlived their useful life and need repair and renovation. A program for taking up Renovation & Modernization (R&M) of seven HEPs at a cost of Rs. 208.96 crore was approved by the State Government. Loan assistance of Rs. 133.95 crore has been tied up with Power Finance Corporation out of which Rs. 32.93 crore have already been availed. Further, Ministry of New & Renewable Energy (MNRE) has also approved subsidy support of Rs 32.94 crore in respect of six HEPs.
  
42. Works on these projects have already been started. After full completion of R&M works there will be increase in annual generation from these HEPs. Likely increase in annual energy generation as worked out by CEA

during its appraisal report after R&M of four main HEPs namely, LJHP, Chenani-I, USHP-I and Ganderbal is 192 MU. R&M will ensure that these old power stations operate for additional period without any major overhauling requirements.

### **ENERGY EFFICIENCY**

43. The desirability of energy efficiency in its supply and use can't be over-emphasized. It is said "Energy saved is Energy generated." To provide a comprehensive framework for maximizing energy efficiency, the J&K Energy Conservation Act, was enacted in 2011. This Act envisaged, *inter alia*, setting up of a Bureau of Energy Efficiency (BEE) to aid and advise on promotion of energy conservation, basing its advice on international experience and latest research in the field of energy conservation. The Act also provides for listing of energy intensive industries and setting up

benchmarks for energy conservation through use of both incentives as well as penalties.

44. To take energy conservation activities forward in a holistic manner, an MoU was entered into by the J&KPDD, BEE and Energy Efficiency Services Ltd (EESL), a Government of India undertaking, in June 2015 when the Union Power Minister visited Srinagar. This MoU is for capacity building of J&KPDD and the objective is to undertake Demand Supply Management (DSM) measures after conducting comprehensive studies on load and preparation of a DSM Action Plan. So far under this MoU, DSM cells have been constituted in Survey Divisions of Srinagar and Jammu. 30 engineers from various wings of JKPDD were deputed to the National Power Training Institute (NPTI) for 'training of trainers' program conducted by the NPTI. DSM regulations have already been notified by JKSERC. EESL has deputed a consultant under manpower support to JKPDD. EESL is

the hiring agency for JKPDD for survey, load research and analysis so that a comprehensive DSM plan is formulated and implemented in the State in the next two years.

45. As a concrete first step towards promoting energy efficiency culture across the State, our Government has decided to launch **Unnat Jyoti by Affordable LEDs for All (UJALA)** programme to be implemented across the State in collaboration with EESL. UJALA seeks to promote high quality LED lighting in the domestic sector by overcoming the high initial/ entry cost barrier. DELP will enable sale of LED bulbs from designated places at a cost that is much less than the per unit market price of Rs.400-500 as replacements of Incandescent Lamps (ICLs) and Compact Fluorescent Lamps (CFLs).
46. The focus of this new initiative will be to make common citizens aware of the benefits

of energy efficiency measures. The Government through EESL, will provide 5 LED lamps of 9W each to every registered consumer at a highly subsidized rate of Rs 20 per lamp (i.e. Rs 100 for a pack of 5 lamps). At the request of consumer, more than 5 LEDs will also be made available at a cost of around Rs. 100 each, which is much less than the obtaining price in the open market. The distribution of 80 lakh LED bulbs in the State will help reduce peak demand in the State by about 250 MW and will save energy consumption by 260 mKWh translating into an annual saving of about Rs 130 crore. I am making a provision of Rs 64 crore in the Budget for the current year towards the subsidy on this account.

47. I am happy to announce that the Street lights in two Municipal Corporations of Jammu and Srinagar and other Municipalities across the State would be replaced in a phased manner with energy efficient smart LED lights with full

metering and dedicated feeders/phase wires. Efforts would be made to outsource the O&M through EESL or a similar agency on an annuity based model. I'm making a provision of Rs 80 crore in the Budget for the current year.

48. EESL will also undertake energy audit of Government offices and implement use of energy efficient LED lighting in all Government buildings across the State in the next two years.

#### **TRAINING AND HUMAN RESOURCE MANAGEMENT**

49. In the new reforms framework ushered in the State, it is particularly important that the Power sector has access to properly trained human resource. Therefore, concerted action is required to be taken for augmenting training infrastructure so that adequate well-trained human resource is made available as per the need of the sector. Efforts are also required to be made so that personnel of

power sector become more cost-conscious and consumer-friendly.

50. As a first concrete step in this direction, in the power budget for the Year 2014-15, the Government announced setting up a dedicated institution under the name, Chenab Power Management and Training Institute. I had also stated in my power budget speech, "Creation of posts of personnel of different categories, based on standard norms for Assets under Management, would be done." I'm happy to inform that steps have been taken to operationalize the Chenab Power Management and Training Institute.
  
51. I'm happy to inform that for expeditious implementation of flagship programmes/ centrally sponsored schemes in the Power Sector, the Government has created two dedicated project wings, one for Kashmir & one for Jammu with creation of 187 posts in

various categories. In addition to these two wings, one Project Management Unit (PMU) has also been created at the Secretariat level. Action is being taken to promote officers in different categories to man these posts.

52. Similarly, for the Chenab Power Management and Training Institute, the basic infrastructure at Baglihar village, which had come up during construction of Stage-I of Baglihar HEP, has been suitably modified to meet the requirements of the training institute, and the matter is being pursued with the Central Institute of Rural Electrification (CIRE) Hyderabad, REC, Government of India and Ministry of Power to sign the MoU and kick start the initiative. Once operational, this will go a long way in providing the much needed impetus to the training needs of the power sector.
53. With these submissions, I commend the Annual Budget 2016-17 to the August House.