



*Ajmer Vidyut
Vitran Nigam
Limited
(AVVNL)*
Inception Report
on Independent
Review of Energy
Audit Methodology
for FY 15-16
(Bhilwara City
Circle)

02 June 2017

To,
CAO(A&R),
Ajmer Vidyut Vitran Nigam Limited (JVVN)
Vidyut Bhawan, Panchsheel Nagar
Makarwali Road, Ajmer-305004

June 2, 2017

Our Reference: Work order issued vide Order No. AVVNL/CAO/A&R/Sr. AO(Rev)/F. /D. 3176 and 3240 dated 17.11.2016 and 22.11.2016 respectively

Dear Sir,

Subject: Submission of draft Inception report for Bhilwara City Circle (4 Sub-divisions) under the assignment 'Independent Review of Energy Audit methodology for 179 sub-division of Ajmer Discom.

This is with reference to the assignment awarded to us vide *work order no. AVVNL/CAO/A&R/Sr. AO(Rev)/F. /D. 3176 and 3240 dated 17.11.2016 and 22.11.2016 respectively*. As per the work order, inception report of 5 sub-divisions was to be submitted. In the meeting dated *21.11.2016 with Contract Monitoring Committee (CMC) headed by Nodal Officer CAO (A&R)*, PwC was instructed to consider 10 sub-divisions of Ajmer City Circle as part of inception work.

PwC submitted the draft inception report on 26.12.2016 but no comments on the report were received. Based on discussions, revised report was again submitted on 23.03.2017. Comments on the revised report were received on 26.04.2017. However despite of regular pursuance, no detailed comments were received. Further in the meeting held with Senior Discom Officials in the chambers of Director Finance, AVVNL on 26.05.2017 and vide letter no. AVVNL/CAO(A&R)/Sr. AO(Rev.)/F. /D. 1057 dated 29.05.2017, it was concluded that 4 sub-divisions of Bhilwara City area be considered for the purpose of inception report. It was also concluded that due to ring fencing in city area, input energy cannot be provided separately for these four sub-divisions. As such, PwC was directed to submit results of 4 sub-divisions of Bhilwara City area as a whole.

This report viz. Inception Report for Bhilwara City Area incorporates the results of 4 sub-divisions of Bhilwara City Area as a whole.

Please feel free to get back to us in case of any clarification.

Yours Sincerely,



Sambitosh Mohapatra

Partner
PricewaterhouseCoopers Private Limited
Building No. 10, Tower - C, 17th Floor,
DLF Cyber City, Gurgaon - 122 002
Email: sambitosh.mohapatra@in.pwc.com
Telephone (Direct): +91 (124) 330 6008

Disclaimer

This report has been prepared based on the information provided by AVVNL. The base data for FY 2015-16, which was required for analysis under this assignment, has been taken from the Discom. Our conclusions are based on the completeness and accuracy of the stated facts in the report; which if not entirely complete or accurate, should be communicated to us immediately, as the inaccuracy or incompleteness could have a material impact on our conclusions.

We have taken all reasonable steps to ensure that the information contained herein has been obtained from reliable sources and that this report is accurate and authoritative in all respects.

Acronyms

Acronym	Meaning
ABR	Average Billing Revenue
Agri	Agriculture
AVVNL	Ajmer Vidyut Vitran Nigam Limited
ARO	Assistant Revenue Officer
CAO	Chief Accounts Officer
CB	Computerized Billing Input Advise Format
CC&AR	Consumer Charges and Allowances Register
Discom	Distribution Company
DPS	Delayed Payment Surcharge
DT	Distribution Transformer
ED	Electricity Duty
FY	Financial Year
KW	Kilowatt
kWh	Kilowatt Hour
M&P	Metering and Protection
MIS	Management Information System
MS	Manual Billing Input Advice Format
MU	Million Units
O&M	Operations and Maintenance
PwC	PricewaterhouseCoopers Private Limited
RERC	Rajasthan Electricity Regulatory Commission
SDO	Sub Divisional Offices
TCOS-2004	Terms and Conditions of Supply- 2004
U/R/T	Urban/Rural/Total
UC	Urban Cess
VCR	Vigilance Commission's Report
WCC	Water Conservation Cess

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1. Objective of the Study

AVVNL intends to award the work on MBC module for 4 sub-divisions of **Bhilwara City Circle** area. In view of this initiative, AVVNL intends to conduct following activities:

Verification & correction of input energy

Verification of correctness of the inputs (MS-14, CB-4 and CB-15) provided by the Sub-division to the billing agencies/processing billing for computation of correction factor and arriving at the actual consumption of (metered & unmetered both) category of consumers

Verification & correction of the amount collected against the amount billed

Collection efficiency (category wise)

Determine realistic AT&C loss of the select Sub-divisions

Determine Average billing rate (Nigam dues & Govt. levies) for each consumer of the category

For conducting the above mentioned activities, AVVNL awarded the study to *PwC*. For conducting this study, PwC conducted field visits across various subdivisions in the Bhilwara City Area. The three broader tasks under this study were **(1) Verification and correction of Input Energy and (2) Verification and correction of Energy Sales & Revenue Billed, (3) Verification and correction of amount collected**. Completion of these three tasks enabled assessment of Collection efficiency, AT&C Losses and Average Billing Rate (ABR).

As per the scope of work, results of 5 sub-divisions were to be submitted in the inception report. However, as AVVNL intends to award MBC module for 4 sub-divisions of Bhilwara city area, PwC was instructed to consider these 4 sub-divisions of Bhilwara Circle as part of inception work.

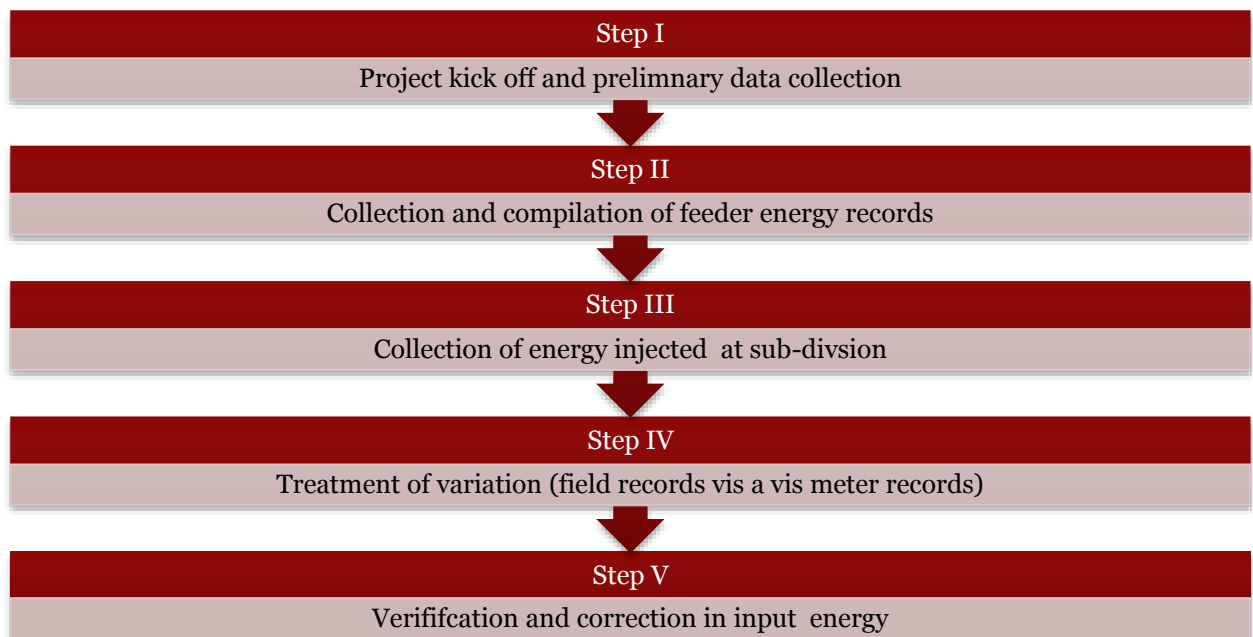
This report, under its subsequent sections, presents the approach followed for completion of aforementioned activities for 4 sub-divisions of Bhilwara circle. The approach described in detail in the subsequent sections will be replicated across all other sub-divisions and circles for completion of the assignment. Along with approach, the subsequent sections also present the results of the study conducted for 4 sub-divisions of Bhilwara circle.

2. Verification and Correction of Input Energy

2.1. Approach followed for verification and correction of Energy Input

The focus of this phase of the assignment was to conduct verification and correction of input energy taking in to account: (1) energy input records of 33kv and 11kv feeders matched with relevant records of sub-divisions (2) verification of multiplying factor. It is pertinent to mention here that as per the consumer billing practices followed in Rajasthan, the energy injected in a month “X” is being billed in month “X+1”. Thus, it may be inferred that the energy billing/sales which has happened in the month of April 2015 is based on the energy injected in the month of March 2015. Similarly, the energy billing/sales for the month of March 2016 is based upon energy injected in the month of February 2016. Therefore, to assess the AT&C loss levels for FY 15, verification and correction of input energy needs to be done for a period of March 2015 to February 2016.

The approach followed for Independent Assessment of Input Energy is as below -



As details of input energy for 4 sub-divisions of Bhilwara city area could not be made available, the following tasks have not been performed for these sub-divisions. However the section details out the methodology that will be adopted across all other areas.

The key activities conducted in each of these steps are summarized as follows:

2.1.1. Step I: Collection and compilation of feeder (input point) energy records

The specific approach and key activities to be carried out in this step are:

- Monthly records of energy received from 220/132 kv GSS SE (M&P)
- At circle, division and sub-division level monthly energy records should be provided at circle office
- Collection of energy injection data in the 33kv feeders from March 2015 to July 2016 from circle SE office.

2.1.2. Step II: Verification of energy records with sub-division level energy statement

Subsequently, meter reading data along with the MF details will be collected for all the feeder meters to verify the log book records with meter information. It is pertinent to mention here that –

- Division wise 33 kv feeders will be identified and monthly meter reading records will be reconciled with the division level energy reconciliation records provided at the circle office
- From 33 kv feeders monthly net input energy will be identified including net energy export/import between divisions and sub-divisions

2.1.3. Step III: Correction of energy input records (33 kV feeder records vis-a-vis sub-division level records)

In this phase, 33 kV feeder energy readings will be verified with division and sub-division level gross energy. From this gross incoming energy, monthly export and import energy will be deducted to identify net energy input at sub-division level.

2.2. Bhilwara City Circle Input Energy Month Wise

The trailing table provides with the data pertaining to the month wise energy input for Bhilwara City Circle. The net input energy into the circle amounts to 4679.63 Lakh Units for FY 2015-16. However it may be noted that data pertaining to the following was not available in case of 4 sub-divisions of Bhilwara City area

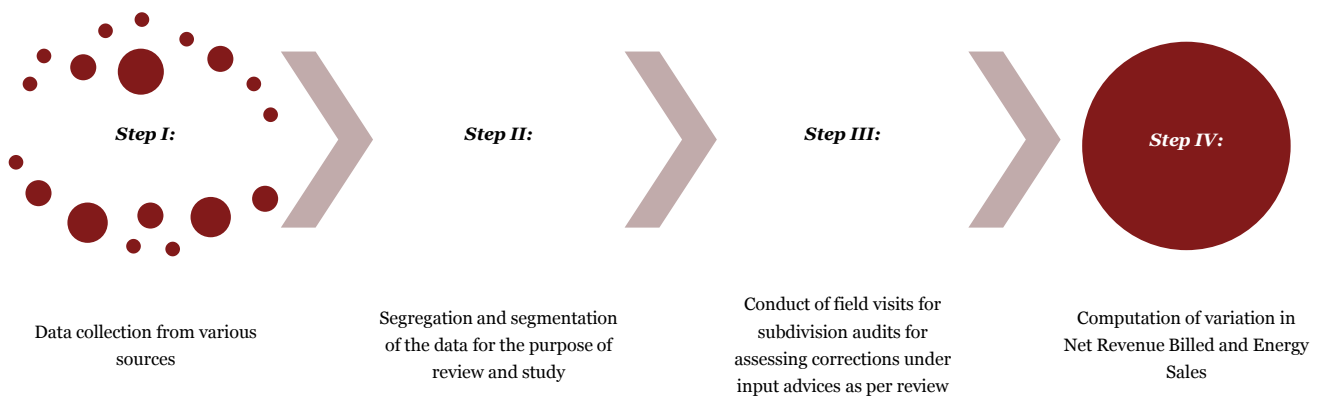
- Feeder wise input energy,
- Input Energy from M&P,
- Break -up of the monthly import/export of energy Division wise and Sub Division wise.

Month	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Total
Input Energy (LU)	347.12	415.23	490.90	439.00	433.89	370.12	456.00	402.93	320.78	322.88	362.22	318.56	4679.63

3. Independent review of methodology for Energy Sales and Revenue Billed

3.1. Approach followed for the independent review of methodology for revenue billed and energy sales

The focus of this phase of the assignment was to conduct an independent review of methodology for ascertaining the total energy sales and revenue billed for the Bhilwara City area in FY 15-16. The approach followed for conducting this phase of study is being described below:



3.1.1. Step I: Data Collection from various sources

We collected data from multiple sources under this assignment for reviewing the existing methodology and performing various analysis. The various data sources are being mentioned below for reference:

Discom Level {SE (IT) and Billing Agency}	Input Advices (Sundry Files)
Circle Level	MIS 3.1 and 3.2 data sheets
	Information regarding Subsidy
Sub-Division Level	Data under CC&AR and VCR
	MS-14 data sheets

3.1.2. Step II: Segregation and segmentation of the data

After collecting data from various sources (Discom and Circle level), our first task was data cleansing for subsequent analysis of the same. After cleansing of the data collected, we performed data segregation and segmentation. Information regarding Sales (normal and sundry segregated) and Revenue Billed (normal and sundry segregated) were extracted from MIS 3.1 data sheet. From the same sheet, information regarding ED, WCC, UC and DPS was also extracted. Data from Input Advices (Sundry files) was segregated under various codes and further segmented under various consumer categories.

3.1.3. Step III: Conduct of field visits for subdivision audits for assessing corrections under input advices

The corrections have been assessed in input advices at subdivision. The objective under this part of study was to assess the corrections in the input advices at 4 subdivisions under Bhilwara Circle. The adjusted energy sales and energy billed have been computed using input advices being sent to Billing agencies by subdivisions. The input advices comprises of (i) sundry reports (CB-4, MS-14, CB-15) to accommodate energy sales & revenue adjustments for some consumers on the account of multiple events including electricity theft, unauthorized extension of load, events of meter running slow or fast, meter replacement etc. and (ii) MS-14 reports to accommodate debits or credits to non-consumers (consumers not in billing records and temporary connections).

RERC has notified certain norms with regards to assessment of energy in cases of energy sales and revenue adjustments to be done under various cases. Further, the Discoms has also notified various circulars from time to time to propagate the methods for making adjustments in energy and revenue billed under various adjustment codes.

3.1.3.1. Assessment of corrections in energy sales and revenue billed

Subdivision audits have been conducted at the 4 sub-divisions of Bhilwara City Circle area for examining the reports pertaining to input advices (MS-14, CB-4 and CB-15) and verifying the same against the inputs provided to the billing agencies by these select sub divisions. The subsequent sub-sections detail the analysis performed for each subdivision.

3.1.3.1.1. Data collection from billing agency and subdivisions

MIS data sheets (3.1) pertaining to adjustments under energy sales and revenue for the period of April'14 to March'15 had been taken from the Central Billing Agency at Jaipur. The data related to MS-14 was also taken under a separate format. Complete sundry data in soft copies was also received for these subdivisions. Data for the individual CB input advice (CB 4, and CB 15) and MS-14 was also sought from the AROs of various subdivisions visited, in cases where the data could not be received from the central billing agency. Data in hard copy, wherever data was not available in soft copy, was also being collected.

3.1.3.1.2. Review of MIS Data

The first level validation check, wherever MIS data was available, on data collected was performed by our teams via verifying the total net adjustment (in units) derived from the CB input advice data base with the total net adjustments reported in the MIS data received from the billing agency. The data received in both the sundry advices and MIS reports has been almost equivalent at various subdivisions. Such validation of data was useful in establishing that the CB input advice data base received from the sub division is comprehensive.

As a next step, our teams analyzed the CB input advice data base by filtering all the entries on the basis of different adjustment codes. Adjustment codes or Transaction codes are defined in the RERC tariff code to guide the Sub-divisional officials to report the sundry entries under various types of transactions.

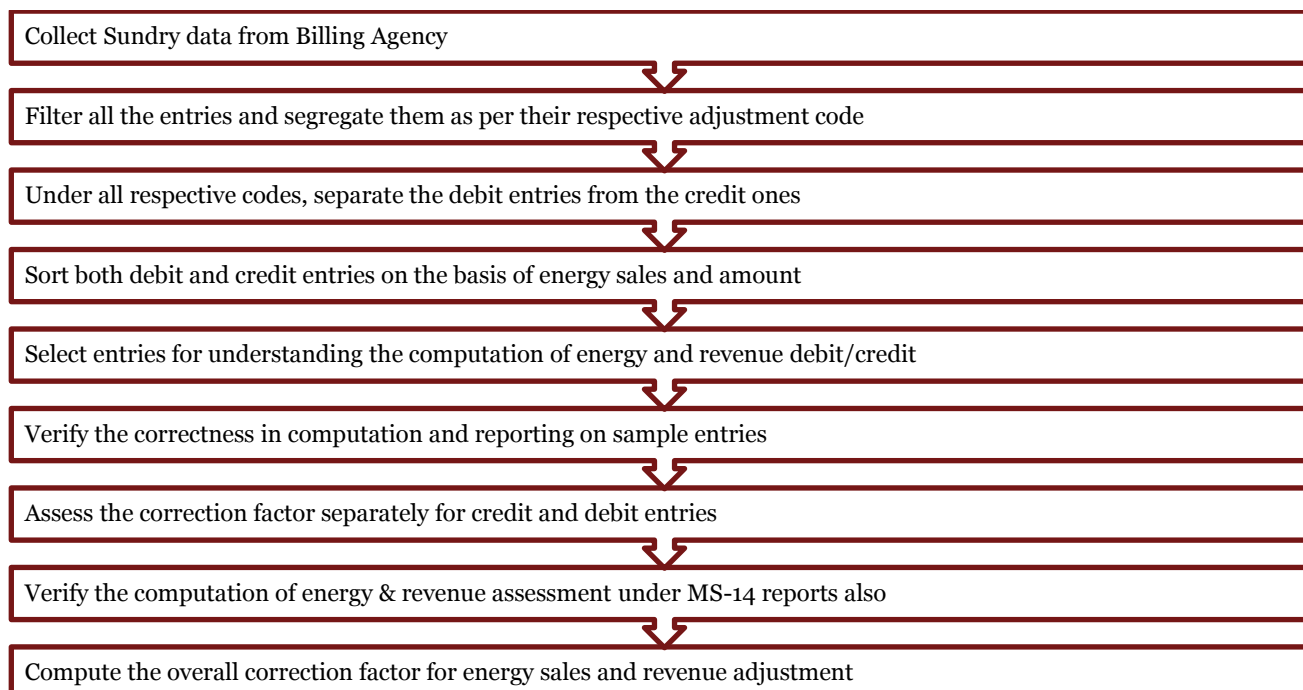
Our teams identified that the following adjustment codes are majorly being used in the sundry reporting by the subdivision officials.

Code	Description	Input advice
1	Assessment on account of theft detected by vigilance/M&P wing	CB-4
2	Assessment on account of theft detected by others	CB-4
3	Assessment on account of average consumption due to meter stopped, defective etc.	CB-4
7	Unauthorized extension of connected load	CB-4
9	Wrong application of Tariff	CB-4
22	Bank collection charges for dishonored cheque	CB-4
28	Cost of burnt/damaged meters	CB-4
36	Difference of fixed service charges	CB-15

In addition to the sundry reporting, we also analyzed the MS-14 reports. These are the input advices prepared by SDOs to accommodate debits or credits accountable to non-consumers and temporary connections. These MS-14 are also part of assessment and realization by adjustment.

3.1.3.1.3. Broad Approach for assessment of corrections in energy sales & revenue billed

In order to arrive at adjusted energy sales under CB 4, CB- 15, our teams analyzed and verified the correctness of the computation of energy assessment and reporting of energy credit/debit under various adjustment codes. The analysis was done in line with the provisions prescribed under RERC regulations, Terms and Conditions of Supply-2004 (TCOS-2004), and other relevant orders/circulars issued by the Discoms. The broad approach adopted for analysis is provided below:



To check entries, our teams referred to the appropriate Consumer Charges and Allowances Register (CC&AR) registers to verify the correctness of the computation. During the audit process, our teams understood the

background of the transactions based on the explanation provided by the Sub division officials. However, the verification of the correctness of the computation and the subsequent reporting was done based upon provisions prescribed under RERC regulations, TCOS-2004, and other relevant orders/ circulars issued by the Discoms.

3.1.3.1.4. Broad analysis done under different Adjustment Codes

During the audits, our teams segregated all the entries as per their respective adjustment codes and analyzed them adjustment code wise. During the audit, it was found that some sundry adjustments in an adjustment code comprised of entries that should have been under different adjustment codes. These entries were treated as per their respective adjustment code only. Specific issues identified under various subdivisions have been discussed under subsequent sections:

- **Adjustment Code 1 & 2:** This code is meant to record entries related to theft detected by M&P Wing/ Vigilance Team/ Others. For analyzing the entries done under this code, we referred the VCRs and CC&AR register to check the background of theft reports. We observed that at various subdivisions, for some of the entries that we analyzed, the total amount received by any consumer against compounding the offence and civil liability was also included in the Board Dues along with ED, WCC and UC. For such entries, we segregated the compounding charges from the Board Dues. Under many entries, especially credit entries, revenue adjustments were being accounted but units were not adjusted. For such entries, we referred VCR files for assessing energy units. Wherever such information was not available, we deduced the energy units from the revenue assessed via back calculation. Not much deviations/ irregularities were observed for theft cases under MS-14 reports.
- **Adjustment Code 3:** Under this code, we found entries pertaining to cases under meter stopped, meter defective etc. We analyzed sample entries under this code and referred the relevant orders (related to application of average consumption) pertaining to such cases for assessing revenue and energy adjustments under such cases.
- **Adjustment Code 7:** Under this code, entries pertaining to unauthorized extension of connected load are meant to be recorded. Under this code, energy is not liable to be computed and debited; as such energy is already recorded on the energy meter. During our audits, we checked for cases where energy was being debited. Under such cases, we applied a correction factor of 'o' to remove such debits. Revenue adjustments were being considered for computation.
- **Adjustment Code 22:** Under this code, entries pertaining to bank collection charges for dishonored cheque are being recorded. We identified that under most entries, defined bank collection charges are being debited to the consumers. Some entries pertaining to other codes were also found under this code; same were segregated and treated under their respective codes. Under this code, energy is not liable to be computed and debited. During our audits, we checked for cases where energy was being debited. Under such cases, we applied a correction factor of 'o' to remove such debits.
- **Adjustment Code 23:** Under this code, entries pertaining to credit or debit on account of premises lock cases are recorded. For these, a preliminary bill is generated if the meter reader is not able to take the reading. The bill is corrected when the actual reading is available with the sub-division and respective credit or debit is given to the consumer.
- **Adjustment Code 28:** Under this code, entries pertaining to cost of burnt/ defective meters are meant to be recorded. As this code pertains to cost adjustments only, there should not be any recording of energy units. During audits, we observed that for some cases, even units were debited in CB reports. The total cost of replacing meters to a consumer divided by average tariff of that consumer category has been used to derive energy units. For such cases, we applied a correction factor of 'o' to remove such debits.

- **Adjustment Code 33:** Under this code, entries related to wrong posting of consumers bills are meant to be recorded. This code pertains to wrong posting, so ideally there should not be any recording of energy units and revenue adjustments. Considering the same, we made required adjustments under the sundry files.`
- **Adjustment Code 36:** Under this code, the entries related to difference in fixed service charges are meant to be recorded. During our audits, we found various types of credit/ debit entries under this code. The entries related to billing of units, credit after settlement, wrong posting and wrong debit etc. are all recorded under this code. For verification of such cases, we referred relevant CB reports and verified them against the entries under CC&AR register.
- **Adjustment Code 51:** Under this code, entries related to tariff subsidy provided are meant to be recorded. This code pertains to entries related to provision of subsidy, so ideally there should not be any recording of energy units. During audits, we checked for cases where units are being recorded under this code. For such cases, we applied a correction factor of 'o' to remove such debits.

3.1.4. Step IV: Computation of Net Revenue Billed and Energy Sales

The various entries were segregated on the basis of adjustment code discussed above and further grouped on the basis of credit and debit transactions. The sundry analysis done under various adjustment codes was tabulated and the sum of corrected energy sales adjustment and revenue billed were compared with the energy sales and revenue billed inputted through input advices sent to billing agencies. The respective correction factors were determined by the variations observed between corrected energy sales & revenue adjustments, deduced through our analysis, and adjusted energy sales & revenue inputted through input advice sent to the billing agencies.

The corrections assessed in the adjusted component for revenue billed and energy sales in the input advices were subsequently applied to the adjusted components for revenue billed and energy sales available under MIS data sheets for 3.1 for assessing the category wise *Revised Sales and Revenue Assessment*.

3.2. Assessment of Net Revenue Billed and Energy Sales

Assessment for Bhilwara City Circle as a Whole (Subdivision wise sheets provided in Appendix 1 A -Input Energy)

Bhilwara City Circle												
Category	Assessment of Sales						Assessment of Revenue					
	Sales as per MIS	Sundry Sales as per MIS	Revised Sundry	Sales Adjustment as per MS-14	Net Sales as per MIS	Net Realistic Sales	Revenue as per MIS	Sundry Revenue as per MIS	Realistic Sundry Revenue	Revenue adjustment as per MS14	Net Revenue as per MIS	Net Realistic Revenue
Domestic -HT	178,740	-	-	-	178,740	178,740	1,218,500	8,505	-	-	1,227,005	1,218,500
Domestic -LT	120,598,704	(291,513)	(414,548)	(81,707)	120,307,191	120,102,449	752,612,925	2,245,260	1,906,936	-	754,858,185	754,519,861
Non-Domestic -HT	12,219,134	61,704	55,357	-	12,280,838	12,274,491	104,994,953	2,433,295	2,435,674	-	107,428,248	107,430,626
Non-Domestic -LT	44,211,616	(431,189)	(668,293)	(17,216)	43,780,427	43,526,107	404,363,044	2,559,604	2,354,191	-	406,922,648	406,717,235
Public Street Light -LT	8,899,089	800,699	773,068	-	9,699,788	9,672,157	62,021,081	6,442,625	6,455,959	-	68,463,707	68,477,040
Agriculture(Metered)-LT	3,194,731	(29,638)	(29,638)	-	3,165,093	3,165,093	16,508,489	171,677	170,823	-	16,680,166	16,679,312
Agriculture(Flat)-LT	-	-	-	-	-	-	-	-	-	-	-	-
Small Industry-LT	5,259,109	(15,707)	45,453	-	5,243,402	5,304,562	36,133,242	453,391	447,676	-	36,586,634	36,580,919
Medium Industry-HT	17,465,920	383,309	383,309	-	17,849,229	17,849,229	114,353,062	4,926,040	4,918,423	-	119,279,102	119,271,485
Medium Industry-LT	15,564,613	45,605	43,538	-	15,610,218	15,608,151	105,117,326	2,022,096	2,015,758	-	107,139,422	107,133,085
Large Industry-HT	193,523,850	-	-	-	193,523,850	193,523,850	1,436,151,187	(97,047,348)	(97,047,348)	-	1,339,103,839	1,339,103,839
Public water Works(S)-LT	3,138,984	73,105	44,692	-	3,212,089	3,183,676	19,309,053	38,622	(9,519)	-	19,347,675	19,299,534
Public water Works(M)-HT	119,511	-	-	-	119,511	119,511	904,272	4,568	-	-	908,840	904,272
Public water Works(M)-LT	-	-	-	-	-	-	-	-	-	-	-	-
Public water Works(L)-HT	1,613,606	-	-	-	1,613,606	1,613,606	11,744,044	61,754	-	-	11,805,798	11,744,044
Mixed Load/Bulk Supply-HT	1,140,049	-	-	-	1,140,049	1,140,049	8,069,498	17,816	17,816	-	8,087,314	8,087,314
Mixed Load/Bulk Supply-LT	246,090	9,549	4,749	-	255,639	250,839	1,820,049	329,924	324,498	-	2,149,973	2,144,547

Bhilwara City Circle												
Category	Assessment of Sales						Assessment of Revenue					
	Sales as per MIS	Sundry Sales as per MIS	Revised Sundry	Sales Adjustment as per MS-14	Net Sales as per MIS	Net Realistic Sales	Revenue as per MIS	Sundry Revenue as per MIS	Realistic Sundry Revenue	Revenue adjustment as per MS14	Net Revenue as per MIS	Net Realistic Revenue
Total -HT	226,260,810	445,013	438,666	-	226,705,823	226,699,476	1,677,435,516	(89,595,369)	(89,675,435)	-	1,587,840,147	1,587,760,082
Total -LT	201,112,936	160,911	(200,979)	(98,923)	201,273,847	200,813,034	1,397,885,209	14,263,200	13,666,321	-	1,412,148,410	1,411,551,530
Total	427,373,746	605,924	237,687	(98,923)	427,979,670	427,512,510	3,075,320,726	(75,332,169)	(76,009,114)	-	2,999,988,557	2,999,311,612

#Flat rate sales has been corrected as per RERC approved norms for Agriculture flat rate consumers on the basis of connected load

3.3. Correction Factor on Energy Sales and Revenue Assessment

Estimated Corrections	Energy Sales as per existing records (kWh)	Revised energy estimates as per Independent Review (kWh)	Corrections obtained (%) for energy sales	Revenue Assessment (Nigam Dues) as per existing records (INR)	Revised Revenue Assessment (Nigam Dues) as per Independent Review (INR)	Corrections obtained (%) for Revenue Assessment (Nigam Dues)
	427,979,670	427,512,510	-0.11%	2999988557	2999311612	-0.02%

4. Verification of amount collected against the amount billed

4.1. Reconciliation of amount collected by cash

In order to reconcile amount collected by cash/online payment under MIS 3.2 with cash/books of accounts sub-division wise month wise details of MIS 3.2 has been reconciled with accounting code 23.301. Amount collected through cash/online payments from various channels like sub-division offices, bill desks, e-mitra, etc. when realized into accounts is reflected in accounting code 23.301 while amount realized against any consumer when posted in billing database is reflected in MIS 3.2. In order to do the reconciliation, the following data was collected

Accounts	Monthly circle wise details of accounting codes 23.301
Billing Agency /Sub-Division level	MIS 3.2 data sheets MIS 3.2 JV-I.2,Form -1

It is important to note that as per prevalent practice, accounts are maintained at divisional level and not at sub-divisional level. Moreover certain amount realized against vigilance is posted directly in the accounting head 23.301 of the circle itself. As such in order to provide a fair representation, reconciliation should be been done at the circle level. However in case of Bhilwara, sub-divisions wise reconciliation has been provided.

Sub Div.	23.301	23.351	3.2 By Cash in Rs. Crs.	Difference (3.2 by cash and 23.301)
CSD I	37.37	37.44	37.62	0.18
CSDII	136.04	135.85	136.52	0.67
CSD III	41.24	40.94	41.37	0.43
CSD IV	107.84	108.02	108.25	0.23
TOTAL	322.49	322.25	323.75	1.50

4.2. Verification of amount under CB-12 with relevant records

Field visits were conducted for each subdivision in the circle to assess correctness of amount posted under input advices CB-12. The input advices comprises of adjustments made to accommodate adjustments for some consumers on account of several events including wrong posting of amount, Dishonoured Cheques, etc. The correctness of such events has been checked in sub-division visits by verifying the relevant records of CC&AR register.

Moreover amount adjusted under CB-12 also appears in the system generated Form 1 of MIS 3.2. Transaction code wise reconciliation has also been done for them and variations if any have been reported.

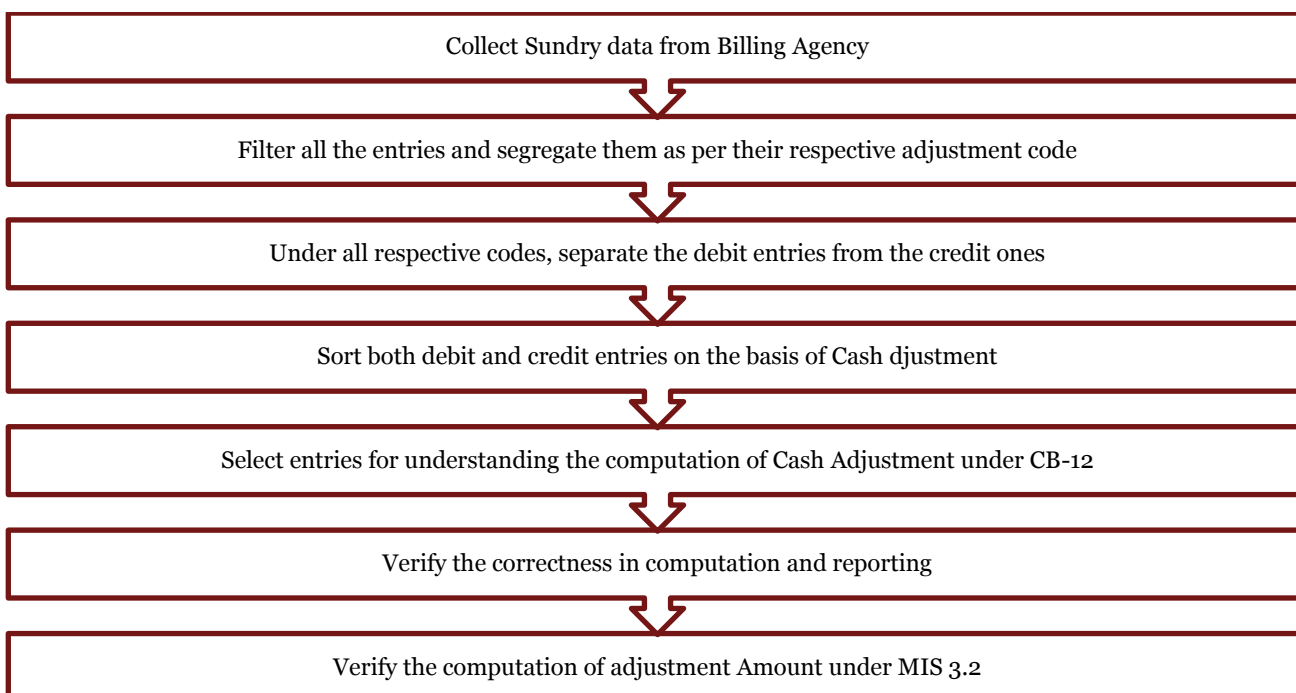
To do the above mentioned tasks, MIS data sheets (MIS 3.2) pertaining to adjustments of revenue for the period of April '15 to March '16 were taken from the Central Billing Agency at Jaipur. The data related to MS-14 was also taken separately. Data for the individual input advice (CB-12) was sought from the billing agency or the AROs of the subdivision. Data was collected in hard copy, wherever data was not available in soft copy.

The input advices were analysed on the basis of different adjustment codes. Adjustment codes or Transaction codes are defined in the RERC tariff code to guide the Sub-divisional officials to report the sundry entries under various types of transactions. The following adjustment codes are majorly being used in the CB-12 input advices by the subdivision officials.

Code	Description	Input advice
33	Incorrect posting	CB-12
34	Accounting of unposted receipts or suspense receipts due to incorrect account numbers over the stub	CB-12
35	Original amount of dishonored cheque	CB-12

RERC has notified norms with regards to assessment of energy in cases of energy sales and revenue adjustments to be done under various cases. Further, the Discoms has also notified various circulars from time to time to propagate the methods for making adjustments in energy and revenue billed under various adjustment codes.

The correctness of the computation of amount under CB-12 was analysed and verified under various adjustment codes in line with the provisions prescribed under RERC regulations, Terms and Conditions of Supply-2004 (TCOS-2004), and other relevant orders/circulars issued by the Discoms. The broad approach adopted for analysis is provided below:



To check entries, appropriate Consumer Charges and Allowances Register (CC&AR) registers were referred and correctness of computation was verified.

4.3. Category wise collection efficiency

Based on the methodology explained in the sections above, realistic category wise realization for FY 2015-16 has been computed and summarized in the table below

Particular	Revenue Assessment as per Independent review (INR)	Revenue Collection as per independent review (INR)	Collection Efficiency (%)
Domestic -HT	1,218,500	1,399,165	114.83%
Domestic -LT	754,519,861	755,985,360	100.19%
Non-Domestic -HT	107,430,626	108,564,321	101.06%
Non-Domestic -LT	406,717,235	406,340,957	99.91%
Public Street Light -LT	68,477,040	67,662,902	98.81%
Agriculture(Metered)-LT	16,679,312	16,970,549	101.75%
Agriculture(Flat)-LT	-	-	0.00%
Small Industry-LT	36,580,919	36,973,991	101.07%
Medium Industry-HT	119,271,485	120,978,860	101.43%
Medium Industry-LT	107,133,085	106,118,081	99.05%
Large Industry-HT	1,339,103,839	1,342,438,709	100.25%
Public water Works(S)-LT	19,299,534	19,895,888	103.09%
Public water Works(M)-HT	904,272	912,859	100.95%
Public water Works(M)-LT	-	-	0.00%
Public water Works(L)-HT	11,744,044	11,890,096	101.24%
Mixed Load/Bulk Supply-HT	8,087,314	8,457,865	104.58%
Mixed Load/Bulk Supply-LT	2,144,547	1,776,304	82.83%
<i>Total - HT</i>	<i>1,587,760,082</i>	<i>1,594,641,876</i>	<i>100.43%</i>
<i>Total -LT</i>	<i>1,411,551,530</i>	<i>1,411,724,032</i>	<i>100.01%</i>
Total	2,999,311,612	3,006,365,908	100.24%

5. AT&C Losses, Collection Efficiency and Revenue Realization for Bhilwara City Circle

As observed in previous sections, the energy input, energy sales and revenue billed, amount collected for the Bhilwara City Circle area have been computed using the approach discussed in the previous sections. Under this section, we have provided the computation of AT&C Losses, Collection efficiency (Category wise) and average billing rate including/Excluding subsidies.

The information related to input energy, sales & assessment and amount collected have been provided under **Appendix 1 A - to Appendix 1 E -Sub-division wise, Category wise subsidy**

5.1. Computation of AT&C Losses, Collection Efficiency and Average Billing Rate

5.1.1. AT&C Losses and Average Billing and Collection Efficiency for Bhilwara City Circle

For FY 20015-16	Units Received (MUs)	Unit Sales (MUs)	Revenue Assessment (Cr)	Revenue Collection(Cr)	Collection Efficiency (%)	AT&C Losses (%)	Avg. Billing Rate (Including Subsidy) (Rs. /KWh)	Avg. Billing Rate (Excluding Subsidy) (Rs. /KWh)
Bhilwara City Area	467.96	427.51	299.93	300.64	100.24%	8.43%	7.02	6.98

5.1.2. Category wise Unit Sales (MUs), Revenue Assessment and Revenue Collection for Bhilwara City Circle

Category wise Unit Sales (MUs) , Amount Billed (Cr) and Revenue Collection- Bhilwara City Circle			
Particular	Energy Sold (MU)	Revenue Assessment (INR)	Revenue Collection(INR)
Domestic -HT	178,740	1,218,500	1,399,165
Domestic -LT	120,102,449	754,519,861	755,985,360
Non-Domestic -HT	12,274,491	107,430,626	108,564,321
Non-Domestic -LT	43,526,107	406,717,235	406,340,957
Public Street Light -LT	9,672,157	68,477,040	67,662,902
Agriculture(Metered)-LT	3,165,093	16,679,312	16,970,549
Agriculture(Flat)-LT	-	-	-
Small Industry-LT	5,304,562	36,580,919	36,973,991
Medium Industry-HT	17,849,229	119,271,485	120,978,860
Medium Industry-LT	15,608,151	107,133,085	106,118,081
Large Industry-HT	193,523,850	1,339,103,839	1,342,438,709
Public water Works(S)-LT	3,183,676	19,299,534	19,895,888
Public water Works(M)-HT	119,511	904,272	912,859
Public water Works(M)-LT	-	-	-
Public water Works(L)-HT	1,613,606	11,744,044	11,890,096
Mixed Load/Bulk Supply-HT	1,140,049	8,087,314	8,457,865
Mixed Load/Bulk Supply-LT	250,839	2,144,547	1,776,304
<i>Total - HT</i>	<i>226,699,476</i>	<i>1,587,760,082</i>	<i>1,594,641,876</i>
<i>Total -LT</i>	<i>200,813,034</i>	<i>1,411,551,530</i>	<i>1,411,724,032</i>
Total	427,512,510	2,999,311,612	3,006,365,908

5.1.3. Category wise Subsidy

Particulars	Subsidy(INR)
Domestic -HT	-
Domestic -LT	4,558,642
Non-Domestic -HT	-
Non-Domestic -LT	-
Public Street Light -LT	-
Agriculture(Metered)-LT	9,444,136
Agriculture(Flat)-LT	-
Small Industry-LT	-
Medium Industry-HT	-
Medium Industry-LT	-
Large Industry-HT	-
Public water Works(S)-LT	-
Public water Works(M)-HT	-
Public water Works(M)-LT	-
Public water Works(L)-HT	-
Mixed Load/Bulk Supply-HT	-
Mixed Load/Bulk Supply-LT	-

Particulars	Subsidy(INR)
Total -HT	-
Total -LT	14,002,777
Total	14,002,777

5.1.4. Category wise Average Billing Rate (Rs. /KWh)

Category wise Average Billing Rate (Inc/Exc Subsidy) (Rs./kWh)						
Particulars	Energy Sold (kWh)	Revenue Assessment (Nigam Dues) (INR)	Revenue Collected (Nigam Dues) (INR)	Subsidy Received (INR)	ABR (With Subsidy)	ABR (W/O Subsidy)
Domestic -HT	178,740	1,218,500	1,399,165	-	6.82	6.82
Domestic -LT	120,102,449	754,519,861	755,985,360	4,558,642	6.28	6.24
Non-Domestic -HT	12,274,491	107,430,626	108,564,321	-	8.75	8.75
Non-Domestic -LT	43,526,107	406,717,235	406,340,957	-	9.34	9.34
Public Street Light - LT	9,672,157	68,477,040	67,662,902	-	7.08	7.08
Agriculture(Metered) -LT	3,165,093	16,679,312	16,970,549	9,444,136	5.27	2.29
Agriculture(Flat)-LT	-	-	-	-	-	-
Small Industry-LT	5,304,562	36,580,919	36,973,991	-	6.90	6.90
Medium Industry-HT	17,849,229	119,271,485	120,978,860	-	6.68	6.68
Medium Industry-LT	15,608,151	107,133,085	106,118,081	-	6.86	6.86
Large Industry-HT	193,523,850	1,339,103,839	1,342,438,709	-	6.92	6.92
Public water Works(S)-LT	3,183,676	19,299,534	19,895,888	-	6.06	6.06
Public water Works(M)-HT	119,511	904,272	912,859	-	7.57	7.57
Public water Works(M)-LT	-	-	-	-	-	-
Public water Works(L)-HT	1,613,606	11,744,044	11,890,096	-	7.28	7.28
Mixed Load/Bulk Supply-HT	1,140,049	8,087,314	8,457,865	-	7.09	7.09
Mixed Load/Bulk Supply-LT	250,839	2,144,547	1,776,304	-	8.55	8.55
<i>Total -HT</i>	<i>226,699,476</i>	<i>1,587,760,082</i>	<i>1,594,641,876</i>	-	<i>7.00</i>	<i>7.00</i>
<i>Total -LT</i>	<i>200,813,034</i>	<i>1,411,551,530</i>	<i>1,411,724,032</i>	<i>14,002,777</i>	<i>7.03</i>	<i>6.96</i>
Total	427,512,510	2,999,311,612	3,006,365,908	14,002,777	7.02	6.98

*Excluding Electricity Duty and other applicable taxes.

5.1.5. Category wise Collection Efficiency

Particulars	Revenue Billed (Nigam Dues) (INR Cr.)	Revenue Collected (Nigam Dues) (INR Cr.)	Collection Efficiency(%) for Nigam Dues
Domestic -HT	1,218,500	1,399,165	114.83%
Domestic -LT	754,519,861	755,985,360	100.19%
Non-Domestic -HT	107,430,626	108,564,321	101.06%
Non-Domestic -LT	406,717,235	406,340,957	99.91%
Public Street Light -LT	68,477,040	67,662,902	98.81%
Agriculture(Metered)-LT	16,679,312	16,970,549	101.75%
Agriculture(Flat)-LT	-	-	-
Small Industry-LT	36,580,919	36,973,991	101.07%
Medium Industry-HT	119,271,485	120,978,860	101.43%
Medium Industry-LT	107,133,085	106,118,081	99.05%
Large Industry-HT	1,339,103,839	1,342,438,709	100.25%
Public water Works(S)-LT	19,299,534	19,895,888	103.09%
Public water Works(M)-HT	904,272	912,859	100.95%
Public water Works(M)-LT	-	-	-
Public water Works(L)-HT	11,744,044	11,890,096	101.24%
Mixed Load/Bulk Supply-HT	8,087,314	8,457,865	104.58%
Mixed Load/Bulk Supply-LT	2,144,547	1,776,304	82.83%
Total -HT	1,587,760,082	1,594,641,876	100.43%
Total -LT	1,411,551,530	1,411,724,032	100.01%
Total	2,999,311,612	3,006,365,908	100.24%

Appendix 1 A - *Input Energy*

Month Wise Input Energy for Bhilwara City Circle

Month	Input Energy (LU)
Apr-15	347.12
May-15	415.23
Jun-15	490.9
Jul-15	439
Aug-15	433.89
Sep-15	370.12
Oct-15	456
Nov-15	402.93
Dec-15	320.78
Jan-16	322.88
Feb-16	362.22
Mar-16	318.56
Total	4679.63

Appendix 1 B - Energy Sales & Revenue Assessment

Sub-division wise energy sales and revenue assessment

Subdivision- CSD - I

Category	CSD I											
	Assessment of Sales						Assessment of Revenue					
	Sales as per MIS	Sundry Sales as per MIS	Revised Sundry	Sales Adjustment as per MS-14	Net Sales as per MIS	Net Realistic Sales	Revenue as per MIS	Sundry Revenue as per MIS	Realistic Sundry Revenue	Revenue adjustment as per MS14	Net Revenue as per MIS	Net Realistic Revenue
Domestic -HT	-	-	-	-	-	-	-	-	-	-	-	-
Domestic -LT	32,621,082	83,871	31,396	-	32,704,953	32,652,478	204,252,104	1,780,685	1,512,606	-	206,032,790	205,764,710
Non-Domestic -HT	3,117,532	23,257	23,257	-	3,140,789	3,140,789	26,943,462	438,336	438,338	-	27,381,798	27,381,799
Non-Domestic -LT	10,548,983	(262,063)	(386,146)	(5,538)	10,286,920	10,157,299	98,880,569	(4,422,965)	(4,493,782)	-	94,457,603	94,386,787
Public Street Light -LT	2,177,986	475,751	475,751	-	2,653,737	2,653,737	14,943,947	4,250,185	4,260,410	-	19,194,132	19,204,358
Agriculture(Metered)-LT	270,317	-	-	-	270,317	270,317	1,304,790	38,212	38,791	-	1,343,002	1,343,581
Agriculture(Flat)-LT	-	-	-	-	-	-	-	-	-	-	-	-
Small Industry-LT	997,171	(22,626)	(35,008)	-	974,545	962,163	7,000,915	(372,231)	(374,082)	-	6,628,684	6,626,832
Medium Industry-HT	268,108	5,928	5,928	-	274,036	274,036	1,919,242	25,032	25,031	-	1,944,273	1,944,273
Medium Industry-LT	257,469	-	-	-	257,469	257,469	1,890,995	3,755	3,755	-	1,894,750	1,894,750
Large Industry-HT	-	-	-	-	-	-	-	-	-	-	-	-
Public water Works(S)-LT	1,136,480	(3,234)	(33,750)	-	1,133,246	1,102,730	7,046,975	(443,377)	(458,048)	-	6,603,598	6,588,927
Public water Works(M)-HT	119,511	-	-	-	119,511	119,511	904,272	4,568	-	-	908,840	904,272
Public water Works(M)-LT	-	-	-	-	-	-	-	-	-	-	-	-
Public water Works(L)-HT	-	-	-	-	-	-	-	-	-	-	-	-
Mixed Load/Bulk Supply-HT	239,815	-	-	-	239,815	239,815	1,611,136	(15,125)	(15,125)	-	1,596,011	1,596,011
Mixed Load/Bulk Supply-LT	58,520	(591)	(591)	-	57,929	57,929	409,105	(3,680)	(3,680)	-	405,424	405,424
Total -HT	3,744,966	29,185	29,185	-	3,774,151	3,774,151	31,378,112	452,811	448,244	-	31,830,922	31,826,355
Total -LT	48,068,008	271,108	51,652	(5,538)	48,339,116	48,114,122	335,729,400	830,584	485,970	-	336,559,984	336,215,369
Total	51,812,974	300,293	80,837	(5,538)	52,113,267	51,888,273	367,107,512	1,283,395	934,213	-	368,390,906	368,041,725

Subdivision- CSD - II

CSD - II												
Category	Assessment of Sales						Assessment of Revenue					
	Sales as per MIS	Sundry Sales as per MIS	Revised Sundry	Sales Adjusment as per MS-14	Net Sales as per MIS	Net Realistic Sales	Revenue as per MIS	Sundry Revenue as per MIS	Realistic Sundry Revenue	Revenue adjustment as per MS14	Net Revenue as per MIS	Net Realistic Revenue
Domestic -HT	-	-	-	-	-	-	-	-	-	-	-	-
Domestic -LT	27,897,683	7,383	5,120	(81,707)	27,905,066	27,821,096	174,026,917	1,109,547	1,074,234	-	175,136,464	175,101,151
Non-Domestic -HT	747,345	-	-	-	747,345	747,345	6,587,785	318,446	318,446	-	6,906,232	6,906,232
Non-Domestic -LT	8,414,777	(199,179)	(199,179)	(2,253)	8,215,598	8,213,346	76,162,888	(218,982)	(241,056)	-	75,943,906	75,921,833
Public Street Light -LT	2,370,400	75,257	75,257	-	2,445,657	2,445,657	16,748,508	536,082	536,082	-	17,284,590	17,284,590
Agriculture(Metered)-LT	1,244,018	(6,113)	(6,113)	-	1,237,905	1,237,905	6,492,113	3,601	3,711	-	6,495,714	6,495,824
Agriculture(Flat)-LT	-	-	-	-	-	-	-	-	-	-	-	-
Small Industry-LT	1,545,439	5,519	5,519	-	1,550,958	1,550,958	10,691,140	203,808	203,808	-	10,894,948	10,894,948
Medium Industry-HT	10,405,223	346,727	346,727	-	10,751,950	10,751,950	68,176,400	4,045,480	4,057,051	-	72,221,880	72,233,451
Medium Industry-LT	7,828,356	46,883	46,883	-	7,875,239	7,875,239	52,485,349	1,413,332	1,413,332	-	53,898,680	53,898,680
Large Industry-HT	109,494,721	-	-	-	109,494,721	109,494,721	767,615,298	11,558,261	11,558,261	-	779,173,559	779,173,559
Public water Works(S)-LT	233,546	-	-	-	233,546	233,546	1,442,663	(1,029)	(1,029)	-	1,441,634	1,441,634
Public water Works(M)-HT	-	-	-	-	-	-	-	-	-	-	-	-
Public water Works(M)-LT	-	-	-	-	-	-	-	-	-	-	-	-
Public water Works(L)-HT	1,204,422	-	-	-	1,204,422	1,204,422	8,708,523	72,153	-	-	8,780,676	8,708,523
Mixed Load/Bulk Supply-HT	112,332	-	-	-	112,332	112,332	1,100,453	(38,040)	(38,040)	-	1,062,413	1,062,413
Mixed Load/Bulk Supply-LT	87,589	-	-	-	87,589	87,589	716,475	5,939	5,939	-	722,414	722,414
Total -HT	121,964,043	346,727	346,727	-	122,310,770	122,310,770	852,188,459	15,956,300	15,895,718	-	868,144,759	868,084,177
Total -LT	49,621,808	(70,250)	(72,513)	(83,960)	49,551,558	49,465,335	338,766,053	3,052,297	2,995,022	-	341,818,350	341,761,074
Total	171,585,851	276,477	274,214	(83,960)	171,862,328	171,776,105	1,190,954,512	19,008,597	18,890,740	-	1,209,963,109	1,209,845,252

Sub-division-CSD - III

CSD-III												
Category	Assessment of Sales						Assessment of Revenue					
	Sales as per MIS	Sundry Sales as per MIS	Revised Sundry	Sales Adjusment as per MS-14	Net Sales as per MIS	Net Realistic Sales	Revenue as per MIS	Sundry Revenue as per MIS	Realistic Sundry Revenue	Revenue adjustment as per MS14	Net Revenue as per MIS	Net Realistic Revenue
Domestic -HT	158,202	-	-	-	158,202	158,202	1,081,804	8,505	-	-	1,090,308	1,081,804
Domestic -LT	29,769,788	(421,877)	(470,363)	-	29,347,911	29,299,425	184,492,064	(1,556,057)	(1,580,114)	-	182,936,007	182,911,951
Non-Domestic -HT	5,169,793	12,694	6,347	-	5,182,487	5,176,140	42,463,857	1,030,731	1,033,108	-	43,494,588	43,496,965
Non-Domestic -LT	13,776,739	(99,040)	(197,676)	(9,425)	13,677,699	13,569,638	123,938,635	3,742,189	3,673,703	-	127,680,823	127,612,338
Public Street Light -LT	1,981,304	125,668	98,037	-	2,106,972	2,079,341	13,970,514	810,198	811,594	-	14,780,712	14,782,108
Agriculture(Metered)-LT	1,413,129	(23,525)	(23,525)	-	1,389,604	1,389,604	7,309,951	29,439	27,896	-	7,339,390	7,337,847
Agriculture(Flat)-LT	-	-	-	-	-	-	-	-	-	-	-	-
Small Industry-LT	1,146,791	486	74,028	-	1,147,277	1,220,819	7,790,646	302,997	300,875	-	8,093,643	8,091,521
Medium Industry-HT	144,885	-	-	-	144,885	144,885	898,573	10,807	-	-	909,379	898,573
Medium Industry-LT	137,022	4,135	2,068	-	141,157	139,090	1,182,979	39,603	37,606	-	1,222,582	1,220,585
Large Industry-HT	-	-	-	-	-	-	-	-	-	-	-	-
Public water Works(S)-LT	1,132,805	31,757	33,860	-	1,164,562	1,166,665	6,922,673	274,477	262,863	-	7,197,150	7,185,536
Public water Works(M)-HT	-	-	-	-	-	-	-	-	-	-	-	-
Public water Works(M)-LT	-	-	-	-	-	-	-	-	-	-	-	-
Public water Works(L)-HT	409,184	-	-	-	409,184	409,184	3,035,521	(10,399)	-	-	3,025,122	3,035,521
Mixed Load/Bulk Supply-HT	787,902	-	-	-	787,902	787,902	5,357,909	70,982	70,982	-	5,428,891	5,428,891
Mixed Load/Bulk Supply-LT	33,894	9,600	4,800	-	43,494	38,694	244,627	39,977	34,687	-	284,603	279,314
Total -HT	6,669,966	12,694	6,347	-	6,682,660	6,676,313	52,837,664	1,110,625	1,104,090	-	53,948,288	53,941,754
Total -LT	49,391,472	(372,796)	(478,772)	(9,425)	49,018,676	48,903,275	345,852,089	3,682,821	3,569,110	-	349,534,911	349,421,200
Total	56,061,438	(360,102)	(472,425)	(9,425)	55,701,336	55,579,588	398,689,753	4,793,446	4,673,200	-	403,483,199	403,362,953

Subdivision- CSD - IV

CSD-IV												
Category	Assessment of Sales						Assessment of Revenue					
	Sales as per MIS	Sundry Sales as per MIS	Revised Sundry	Sales Adjustment as per MS-14	Net Sales as per MIS	Net Realistic Sales	Revenue as per MIS	Sundry Revenue as per MIS	Realistic Sundry Revenue	Revenue adjustment as per MS14	Net Revenue as per MIS	Net Realistic Revenue
Domestic -HT	20,538	-	-	-	20,538	20,538	136,697	-	-	-	136,697	136,697
Domestic -LT	30,310,151	39,110	19,299	-	30,349,261	30,329,450	189,841,839	911,086	900,210	-	190,752,925	190,742,049
Non-Domestic -HT	3,184,464	25,753	25,753	-	3,210,217	3,210,217	28,999,849	645,782	645,782	-	29,645,631	29,645,631
Non-Domestic -LT	11,471,117	129,093	114,708	-	11,600,210	11,585,825	105,380,953	3,459,363	3,415,325	-	108,840,316	108,796,278
Public Street Light -LT	2,369,399	124,023	124,023	-	2,493,422	2,493,422	16,358,111	846,161	847,872	-	17,204,273	17,205,984
Agriculture(Metered)-LT	267,267	-	-	-	267,267	267,267	1,401,635	100,425	100,425	-	1,502,060	1,502,060
Agriculture(Flat)-LT	-	-	-	-	-	-	-	-	-	-	-	-
Small Industry-LT	1,569,708	914	914	-	1,570,622	1,570,622	10,650,542	318,817	317,076	-	10,969,359	10,967,617
Medium Industry-HT	6,647,704	30,654	30,654	-	6,678,358	6,678,358	43,358,848	844,723	836,340	-	44,203,570	44,195,188
Medium Industry-LT	7,341,766	(5,413)	(5,413)	-	7,336,353	7,336,353	49,558,003	565,406	561,066	-	50,123,409	50,119,069
Large Industry-HT	84,029,129	-	-	-	84,029,129	84,029,129	668,535,889	(108,605,609)	(108,605,609)	-	559,930,280	559,930,280
Public water Works(S)-LT	636,153	44,582	44,582	-	680,735	680,735	3,896,741	208,551	186,695	-	4,105,292	4,083,436
Public water Works(M)-HT	-	-	-	-	-	-	-	-	-	-	-	-
Public water Works(M)-LT	-	-	-	-	-	-	-	-	-	-	-	-
Public water Works(L)-HT	-	-	-	-	-	-	-	-	-	-	-	-
Mixed Load/Bulk Supply-HT	-	-	-	-	-	-	-	-	-	-	-	-
Mixed Load/Bulk Supply-LT	66,087	540	540	-	66,627	66,627	449,843	287,689	287,552	-	737,532	737,395
Total -HT	93,881,835	56,407	56,407	-	93,938,242	93,938,242	741,031,282	(107,115,104)	(107,123,487)	-	633,916,177	633,907,795
Total -LT	54,031,648	332,849	298,653	-	54,364,497	54,330,301	377,537,668	6,697,498	6,616,219	-	384,235,165	384,153,887
Total	147,913,483	389,256	355,060	-	148,302,739	148,268,543	1,118,568,950	(100,417,607)	(100,507,267)	-	1,018,151,343	1,018,061,682

Appendix 1 C - Revenue Collection

Sub-division wise Revenue Collection

Category	CSD-I	CSD-II	CSD-III	CSD-IV	Revenue Collection
Domestic -HT	-	-	1,132,578	266,587	1,399,165
Domestic -LT	205,866,009	175,836,024	183,729,820	190,553,508	755,985,360
Non-Domestic -HT	27,301,716	7,017,744	44,479,612	29,765,249	108,564,321
Non-Domestic -LT	95,764,665	76,822,665	125,311,994	108,441,632	406,340,957
Public Street Light -LT	19,373,886	16,097,383	14,865,890	17,325,744	67,662,902
Agriculture(Metered)-LT	1,361,152	6,511,779	7,493,121	1,604,497	16,970,549
Agriculture(Flat)-LT	-	-	-	-	-
Small Industry-LT	6,719,528	10,994,159	8,163,709	11,096,596	36,973,991
Medium Industry-HT	2,008,237	73,235,881	911,471	44,823,272	120,978,860
Medium Industry-LT	1,898,357	53,168,969	1,211,326	49,839,428	106,118,081
Large Industry-HT	-	780,748,579	-	561,690,130	1,342,438,709
Public water Works(S)-LT	6,727,132	1,654,203	7,383,905	4,130,647	19,895,888
Public water Works(M)-HT	912,859	-	-	-	912,859
Public water Works(M)-LT	-	-	-	-	-
Public water Works(L)-HT	-	8,824,235	3,065,861	-	11,890,096
Mixed Load/Bulk Supply-HT	1,654,051	1,062,417	5,741,397	-	8,457,865
Mixed Load/Bulk Supply-LT	405,174	729,964	269,011	372,155	1,776,304
Total -HT	31,876,863	870,888,856	55,330,919	636,545,238	1,594,641,876
Total -LT	338,115,902	341,815,146	348,428,777	383,364,207	1,411,724,032
Total	369,992,765	1,212,704,002	403,759,696	1,019,909,445	3,006,365,908

Appendix 1 D - *Sub-Division wise AT&C Losses*

Sub-division wise T&D Loss, Collection Efficiency and AT&C Losses

Sub division	Input Energy(MU)	Revised Sales (MU)	T&D Losses (%)	Revised Billed Amount(Crs.)	Revised Amount Collection (Crs.)	Collection Efficiency(%)	AT&C Losses(%)
CSD -I	-	51.89	-	36.80	37.00	100.53%	-
CSD-II	-	171.78	-	120.98	121.27	100.24%	-
CSD-III	-	55.58	-	40.34	40.38	100.10%	-
CSD-IV	-	148.27	-	101.81	101.99	100.18%	-
Total	467.96	427.51	8.64%	299.93	300.64	100.24%	8.43%

Appendix 1 E - *Sub-division wise, Category wise subsidy*

Sub-division- CSD – I

CSD-I			
Categories	Net Realistic Sales	Net Realistic Revenue	ABR
Domestic -HT	-	-	-
Domestic -LT	32,652,478	205,764,710	6.30
Non-Domestic -HT	3,140,789	27,381,799	8.72
Non-Domestic -LT	10,157,299	94,386,787	9.29
Public Street Light -LT	2,653,737	19,204,358	7.24
Agriculture(Metered) -LT	270,317	1,343,581	4.97
Agriculture(Flat) -LT	-	-	-
Small Industry -LT	962,163	6,626,832	6.89
Medium Industry -HT	274,036	1,944,273	7.09
Medium Industry -LT	257,469	1,894,750	7.36
Large Industry -HT	-	-	-
Public water Works(S)-LT	1,102,730	6,588,927	5.98
Public water Works(M) -HT	119,511	904,272	7.57
Public water Works(M) -LT	-	-	-
Public water Works(L) -HT	-	-	-
Mixed Load/Bulk Supply -HT	239,815	1,596,011	6.66
Mixed Load/Bulk Supply -LT	57,929	405,424	7.00

Sub-division- CSD - II

CSD-II			
Categories	Net Realistic Sales	Net Realistic Revenue	ABR
Domestic -HT	-	-	-
Domestic -LT	27,821,096	175,101,151	6.29
Non-Domestic -HT	747,345	6,906,232	9.24
Non-Domestic -LT	8,213,346	75,921,833	9.24
Public Street Light -LT	2,445,657	17,284,590	7.07
Agriculture(Metered) -LT	1,237,905	6,495,824	5.25
Agriculture(Flat) -LT	-	-	-
Small Industry -LT	1,550,958	10,894,948	7.02
Medium Industry -HT	10,751,950	72,233,451	6.72
Medium Industry -LT	7,875,239	53,898,680	6.84
Large Industry -HT	109,494,721	779,173,559	7.12
Public water Works(S)-LT	233,546	1,441,634	6.17
Public water Works(M) -HT	-	-	-
Public water Works(M) -LT	-	-	-
Public water Works(L) -HT	1,204,422	8,708,523	7.23
Mixed Load/Bulk Supply -HT	112,332	1,062,413	9.46
Mixed Load/Bulk Supply -LT	87,589	722,414	8.25

Sub-division- CSD - III

CSD-III			
Categories	Net Realistic Sales	Net Realistic Revenue	ABR
Domestic -HT	158,202	1,081,804	6.84
Domestic -LT	29,299,425	182,911,951	6.24
Non-Domestic -HT	5,176,140	43,496,965	8.40
Non-Domestic -LT	13,569,638	127,612,338	9.40
Public Street Light -LT	2,079,341	14,782,108	7.11
Agriculture(Metered) -LT	1,389,604	7,337,847	5.28
Agriculture(Flat) -LT	-	-	-
Small Industry -LT	1,220,819	8,091,521	6.63
Medium Industry -HT	144,885	898,573	6.20
Medium Industry -LT	139,090	1,220,585	8.78
Large Industry -HT	-	-	-
Public water Works(S)-LT	1,166,665	7,185,536	6.16
Public water Works(M) -HT	-	-	-
Public water Works(M) -LT	-	-	-
Public water Works(L) -HT	409,184	3,035,521	7.42
Mixed Load/Bulk Supply -HT	787,902	5,428,891	6.89
Mixed Load/Bulk Supply -LT	38,694	279,314	7.22

Sub-division – CSD - IV

CSD-IV			
Categories	Net Realistic Sales	Net Realistic Revenue	ABR
Domestic -HT	20,538	136,697	6.66
Domestic -LT	30,329,450	190,742,049	6.29
Non-Domestic -HT	3,210,217	29,645,631	9.23
Non-Domestic -LT	11,585,825	108,796,278	9.39
Public Street Light -LT	2,493,422	17,205,984	6.90
Agriculture(Metered) -LT	267,267	1,502,060	5.62
Agriculture(Flat) -LT	-	-	-
Small Industry -LT	1,570,622	10,967,617	6.98
Medium Industry -HT	6,678,358	44,195,188	6.62
Medium Industry -LT	7,336,353	50,119,069	6.83
Large Industry -HT	84,029,129	559,930,280	6.66
Public water Works(S)-LT	680,735	4,083,436	6.00
Public water Works(M) -HT	-	-	-
Public water Works(M) -LT	-	-	-
Public water Works(L) -HT	-	-	-
Mixed Load/Bulk Supply -HT	-	-	-
Mixed Load/Bulk Supply -LT	66,627	737,395	11.07

Appendix 1 F - *Instructions for Submission of Inception Report for Bhilwara City Circle.*



AJMER VIDYUT VITRAN NIGAM LIMITED.
Corporate Identification Number (CIN) -U40109RJ2000SGC016482
Regd. Off Vidyut Bhawan, Panchsheel Nagar, Makadwadi Road, Ajmer-305004
Phone 2944517 Fax- 2145-2944517. Email- customer.section@ajvnl.com Website- www.ajvnl.com

No. AVVNL/CAO(REV.)/Sr. AO (REV.) /F. /D- 18/3 Date:- 25-5-2017

M/s Price Water House Coopers Pvt. Ltd.,
Building No.10., Tower-C, 17th Floor,
DLF Cyber city, Gurugram, Haryana

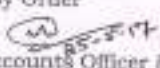
Sub:- Acceptance of contract agreement.

Ref:- Work order Independent Review of Energy Audit for F.Y. 2015-16
awarded to M/s PWCPL vide order No. AVVNL/CAO/A&R/Sr. AO
(Rev.) / F./D. 3240 Dated 22.11.2016


On the above cited subject it is stated that as per clause no. 28 of above mentioned work order a duly signed contract agreement was submitted by you the acceptance of such contract agreement is here by conveyed to you after signing by CAO (A&R), AVVNL, Ajmer.

Encl. As above contract agreement.

By Order


Assistant Accounts Officer (Rev.)
AVVNL, Ajmer

Copy to the Superintending Engineer (IT), AVVNL, Ajmer.


Assistant Accounts Officer (Rev.)

Looking forward...