REPORTABLE

* **IN THE HIGH COURT OF DELHI AT NEW DELHI**

\+ **WRIT PETITION (C) NO. 24041/ 2005**

% **Date of Decision** : April 30th , 2008.

VINOD KUMAR JAIN .... Petitioner.

Through Mr. Arvind Sah, Advocate.

VERSUS

BSES RAJDHANI POWER LIMITED .... Respondent.

Through Mr. Amit Kapur, Mr. Apoorva Misra and Mr. Mohit Jolly, Advocates.

CORAM:

HON'BLE MR. JUSTICE SANJIV KHANNA

1. Whether Reporters of local papers may be allowed to see the judgment?
2. To be referred to the Reporter or not ?
3. Whether the judgment should be reported in the Digest ?

SANJIV KHANNA, J:

1. The petitioner Mr. Vinod Kumar Jain has filed this writ petition, which involves interpretation of Rule 57 of the Electricity Rules, 1956 as to when an electricity meter can be regarded as defective.

2. The respondents in their counter affidavit to the writ petition did not raise any objection as to maintainability of the writ petition on the

ground of alternative remedy under Section 42(5) of the Electricity Act, 2003, being available to the petitioner but during the course of arguments an objection to this effect was raised. However, I am not inclined to entertain the said objection at this belated stage as the writ petition was filed in 2005. Moreover, alternative remedy is not an absolute bar and a Writ Court has discretion, whether or not to entertain the Writ or relegate the parties to take recourse to alternative remedy. As legal interpretation of Rule 57 of the Electricity Rules, 1956 arises for consideration, I do not think it will be appropriate to dismiss the writ petitions on the ground of alternative remedy and at this belated stage relegate the parties and force them to go before the Grievance Forum and Ombudsman and thereafter approach this Court.

3. Rule 57 of the Indian Electricity Rules 1956, reads as under:-

> "**57. Meters, maximum demand indicators and other apparatus on consumer's premises.-** (1) Any meter or maximum demand indicator or other apparatus placed upon a consumer's premises in accordance with section 26 shall be of appropriate capacity and shall be deemed to be correct if its limits of error are within the limits specified in the relevant Indian Standard Specification and where no such specification exists, the limits of error do not exceed 3 per cent above or below absolute accuracy at all loads in excess of one tenth of full load and up to full load:
>
> [Provided that for extra high voltage consumers the limit of error shall be ± 1 per cent.]

> (2) No meter shall register at no load.
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> (3) Every supplier shall provide and maintain in proper condition such suitable apparatus as may be prescribed or approved by the Inspector for the examination, testing and regulation of meters used or intended to be used in connection with the supply of energy:
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> Provided that the supplier may with the approval of the Inspector and shall, if required by the Inspector, enter into a joint arrangement with any other supplier for the purpose aforesaid.
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> (4) Every supplier shall examine, test and regulate all meters, maximum demand indicators and other apparatus for ascertaining the amount of energy supplied before their first installation at the consumer's premises and at such other intervals as may be directed by the State Government in this behalf.
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> (5) Every supplier shall maintain a register of meters showing the date of the last test, the error recorded at the time of the test, the limit of accuracy after adjustment and final test, the date of installation, withdrawal, reinstallation, etc., for the examination of the Inspector or his authorized representative.
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> [(6) Where the supplier has failed to examine, test and regulate the meters and keep records thereof as aforesaid, the Inspector may cause such meters to be tested and sealed at the cost of the owner of the meters in case these are found defective.]"

4. Rule 57(1) stipulates in plain and simple words that a meter shall be placed upon a consumer's premises for recording consumption of electricity and shall be deemed to be correct, if the limit of error is within the limits as specified under the relevant Indian

Standard Specification and if no such specification exists, the limits of error should not exceed 3% (or 1% in case of high voltage consumers) above or below absolute accuracy at all loads in excess of 1/10th of the full load. The first part of the aforesaid Rule states that a meter would be deemed to be correct, if the errors are within the specified limits as are fixed by Indian Standard Specifications. Where Indian Standard Specifications have not fixed limits of error, then the error should not exceed 3% or 1% above or below absolute accuracy. 3% or 1% error formula does not apply, when limits of error are fixed and specified under the relevant Indian Standard Specification.

5. The petitioner submits that at his request the meter installed at his premises at 47/3, Jonapur, Vindhyachal Farms, Mehrauli, Delhi was inspected on 9th November, 2005 and the inspection showed that the meter was running fast by 2.82%. This is obviously within 3% limit as stipulated in second part of Rule 57. It is the case of the petitioner that first part of Rule 57 is applicable as Indian Standard Specifications have fixed limits of error for electricity meters recording consumption. Per contra, the case of the respondent is that Indian Standard Specifications fixed by Bureau of Indian Standards under ET 13 and subsequent amendments are not applicable. ET 13 or IS 13779/1999 is not applicable as the said specifications and limits of error cannot be applied to actual field conditions and as they do not

take into consideration reference values at site which may be different from the parameters on the basis of which limit of error has been fixed by Bureau of Indian Standards.

6. Rule 57(1) as quoted above does not draw any distinction between field standards or standards fixed under ideal testing conditions. Rule 57(1) stipulates that where Indian Standard Specifications have been fixed, a meter will be deemed to be correct if it is within the limits of error fixed by Indian Standard Specifications. It is not for the Court to modify, amend or rewrite the relevant Rule. The Rule is plain, clear and unequivocal. There is no ambiguity which requires any other interpretation to be given. Once Indian Standard Specifications are fixed, a meter will be deemed to be correct if it meets the parameters fixed. Error beyond the parameters fixed will mean that the meter is defective. 3% or 1% Rule will apply only if no parameters or specifications are fixed by Indian Standard Specifications. The second part of Rule 57, therefore, does not apply, when specifications, error limits are fixed by Bureau of Indian Standards. It is, therefore, not possible to accept the contention of the respondent-Distcom that even if Bureau of Indian Standards has fixed specifications-error limits, 3% or 1% formula will continue to apply.

7. I have also examined the contention of the respondent that IS 13779, which was introduced in the year 1999, and standards fixed

therein cannot be applied to the actual field conditions and is applicable in case of laboratory tests. The respondent-Distcom relies upon minutes of the meeting held on 1st September, 2005 in which members of the respondent-Distcom and the other private Distcoms including meter manufacturers were present. The Additional Director General requested discussion on the following three points:

a. The applicable limits of errors for meters in field condition.
b. The validity of calibration of a meter
c. Guidelines on calibration of meters once the meter is calibrated.

8. The stand taken by the respondent-distcom was that the behavior of the meters in the field depends upon varying conditions of influenced quantities acting together including neutral, proper connections of the phases etc. BSES had taken a stand that the meters when tested in the field tend to have positive errors because of factors such as voltage and frequency being lower than the reference values and temperature being higher than the reference temperature. This admission made by the BSES is recorded in the minute dated 1st September, 2005. The relevant portion of the minute reads as under:

> "It was informed by member from BSES that meters which are tested in field tend to have positive errors because of factors such as voltage and frequency being lower than the reference values and temperature being higher than the reference temperature."

9. There is clear admission in the said statement that meters in field conditions show positive errors. This is also fortified by the report submitted by Public Grievance Cell dated 21st August, 2007 in which it was pointed out that out of 243 meters tested by them, 218 meters were found showing excess consumption and only 25 meters were found showing less consumption. It appears that the Chairman presiding over the meeting dated 1st September, 2005 agreed with the views expressed by BSES by stating that the limits of error specified in the Indian Standards are valid under ideal conditions and do not give true picture of the effect of several influence quantities on the meters at a given time, which is the case when meters are installed and tested in the field. It was, in fact, stated by him that no international standard has been specified for testing of meters in field conditions. The said observation recorded by the Chairman is contrary to the statement made on behalf of North Delhi Power Limited, who had opined that testing of energy meters in field conditions is already covered by the existing Indian standards. He made specific reference to table 17 of IS 13779. It would be pertinent to quote the relevant portion of the minutes of the meeting for the sake of clarity; the said portion runs as under:

> "Shri S.P. Naphade of NDPL opined that accuracy of energy meters in field conditions is already covered in the existing Indian Standards. He quoted Table 17 of IS 13779 which gives limit of variation of error under different influence quantities and also specifies

> the positive limits of error below 0.7 of reference voltage. The Chairman clarified that the limits of errors specified in the Indian Standards are valid under reference conditions and do not give the true picture of the effect of several influence quantities on the meter at a given time, which is the case when meters are installed and tested in field. He clarified the distinction between error and uncertainty and emphasized that no international standard has specified errors for testing in field conditions."

10. I have made reference to the various viewpoints expressed by the different participants representing stakeholders, as they appear in the minutes of the meeting dated 1st September 2005. However, the minutes of the meeting dated 1st September, 2005 cannot be a determining factor as far as Rule 57(1) is concerned. Rule 57(1) in simple words stipulates that once the limits of error are specified under the Indian Standards Specifications, the same will be used as a bench mark for determining whether a meter is correct or defective. Opinions expressed cannot be used for interpreting a Rule or even the specification fixed, for which the specification itself has to be referred to. Minutes of meeting dated 1st September, 2005 is an internal document incorporating views expressed by different and divergent persons.

11. I have examined IS 13779/1999, a copy of which has been placed on record by the respondent-Distcom. The foreword to the said Rules states that the draft was finalized by the Equipment for Electrical Measurement and Load Control Sectional Committee and

the same was approved by the Electrotechnical Division Council. The standard was first published in 1993 and had been updated when it was adopted in 1999. Thus, the standards approved by IS 13779 were laid down after proper scrutiny and examination by a qualified committee which finalized the draft and it was approved by a Division Council. It had undergone detailed scrutiny and examination at the hands of experts before it was accepted. The specifications cannot be altered, amended or changed without following the prescribed procedure and examination by experts. The fourth paragraph of the foreword to IS 13779 reads as under:-

> "The test levels as specified in this standard are regarded as minimum values to guarantee the proper function of the meter under normal working conditions. For special applications other test levels might be necessary and have to be fixed between the user and the manufacturer."

12. Thus, the Expert Committee and the Division Council had finalized and formulated the standards. The test levels were specified to ensure that the minimum prescribed parameters are met under the normal working conditions. The Expert Committee and the Council was aware of the normal conditions including the relevant factors which influence and affect performance. The values fixed were co-relatable to proper functioning of a meter under normal working conditions. Clause 3.5.5 fixes the Class Index and stipulates that meter is to be tested under reference conditions including permitted

tolerance on reference values as defined in the standard itself. Clause 3.6 defines influence quantities and the term reference conditions. The Bureau was conscious of the fact that there may be variation of errors due to influence quantities and operating conditions. The requirements specify that the meter shall be designed and constructed in a way to avoid error beyond prescribed limits in use under normal conditions and to ensure protection against solid objects, dust and water. “Normal conditions”, obviously has reference to actual field conditions and not to “ideal” or “laboratory conditions”. A meter casing should be such that any non-permanent deformation cannot affect the satisfactory operation of the meter (Clause 6.2). A meter is also required to be insulated to have resistance against penetration of dust and water and have resistance to heat and fire. Clause 9.4 stipulates that under normal conditions of use, electrical circuits and insulation should not reach a temperature which might adversely affect the operation of the meter. Temperature rise at any point on the external surface of the meter should not exceed 20K with an ambient temperature of 45 degree Celsius. Table 15 specifies percentage of error limits. Clause 12.10 prescribes test for accuracy requirements. Tables 23 and 24 deal with voltage and current balance and the percentage of error which are acceptable. The said tables read as under:-

"**Table 23 Voltage and Current Balance**

(Clauses 12.10.1 and 12.11)

Sl. No. (1)	**Polyphase Meters** (2)	**Class of Meters** (3) (4)
i)	Each of voltages between line and neutral or between any two lines shall not differ from the average corresponding voltage by more than	± 1% ± 1%
ii)	Each of the currents in the current circuit shall not differ from the average current by more than	± 2% ± 2%
iii)	The phase displacements of each of these currents from the corresponding line-to-neutral voltage, irrespective of the power factor, shall not differ from each other by more than	2 deg 2 deg

Table 24 Reference Conditions

(Clause 12.10.1)

Sl. No. (1)	**Influence Quantity** (2)	**Reference Value** (3)	**Permissible Tolerances** (4)
i)	Ambient temperature (see Note I)	Reference temperature or in its absence 27 Degree Celsius	± 2 Degree Celsius
ii)	Voltage	Reference voltage (see Note 3)	± 1 percent
iii)	Frequency	Reference frequency (see Note 3)	± 0.3 percent
iv)	Waveform	Sinusoidal voltage and current	Distortion factor less than 2

			percent
v)	Magnetic induction of external origin at the reference frequency	Magnetic induction equal to zero (see Note 4)	Induction value which causes a variation of error not greater than 0.2 per cent (class I) and 0.3 per cent (class 2) but in any case should not be greater than 0.05mT (see Note 2)

13. A bare perusal of table 24 shows that while fixing specifications, the bureau was conscious that ambient temperature, voltage frequency wherefrom magnetic induction can vary and, therefore, permissible tolerances have been indicated in column 4. In these circumstances, it cannot be held that the specifications fixed in IS 13779 are not for field specifications. The specifications fixed are for normal working conditions with permissible tolerances as indicated in table 24. Clauses 12.11 and 12.16 of IS 13779 provide for parameters to be taken into consideration and the variation that may be caused by one influence quantity. Adjustments can also be made. The relevant clauses are as under:-

> "**12.16 Limits of Error and Interpretation of Test Results**
>
> a) Limits of error as specified in 11.1 shall be verified.

b) Certain test results may fall outside the limits indicted in Tables 15 and 16. Owing to uncertainties of measurements and other parameters capable of influencing the measurements. However, if by one displacement of the zero line parallel to itself by no more than the limits indicated in Table 25, all the test result are brought within the limits indicated in Tables 15 and 16, the meter type shall be considered acceptable.
c) If the tests are made at a temperature other than the reference temperature, including permissible tolerances, the results shall be corrected by applying the appropriate temperature coefficient of the meter."

14. The test of accuracy is also required to be carried out by meter testing equipment of requisite accuracy clause as laid down in IS12346. I may notice here that the respondents in their counter affidavit have pointed out that another test was done on 27th December, 2005. The said test report indicated that the same meter which was earlier inspected on 3rd October, 2005 and had shown inaccuracy level of +2.81% had jumped to inaccuracy level of +25.64%. The said test on 27th December, 2005 was done by officers of the Respondent-Distcom. There is huge variation between the two test reports, which is a cause of concern.

15. In view of the findings given above, the Writ Petition is partly allowed to the limited extent that it is held that the IS 13779/1999 as amended up-to-date is applicable for determining whether a meter is defective under Rule 57 of the Electricity Rules, 1956.The said specification forms the benchmark to decide whether

or not a meter is defective. It appears that the test report dated 3rd October, 2005, did not take the said parameters into consideration and is accordingly contrary to the Rules. However, it is not possible for this Court to give any specific finding whether parameters and specifications as fixed by IS 13779/1999 were met and the meter was defective or was not defective, at the time of the inspection on 3rd October, 2005. I may also notice here that on 27th December, 2005 as per the meter testing report, the meter in question was found to be running fast by 25.64%, which is admittedly excessive and beyond the prescribed limit. The said meter was thereafter replaced. To do substantial justice between the parties, it is directed that the respondents will pass a speaking order after hearing the petitioner on the basis of new meter, which was installed after 27th December 2005 for the period 16th July, 2004 onwards till the new meter was fixed. The question whether the petitioner is entitled to any benefit in view of inspection report dated 27th December, 2005 is left open as this is not a subject matter of the cause mentioned in the petition and was not urged by the petitioner.

The writ petition is accordingly disposed of. No costs.

(SANJIV KHANNA)
JUDGE

APRIL 30, 2008
VKR/P