

**Electrical Planning and Design Institute of
the Ministry of Electric Power Industry**

**Regulation for Drawing and
Construction of Power Transmission
Line Towers**

DLGJ136-1997

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Ministry of Electric Power Industry

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**Inform about Issuing the *Regulation for Drawing
and Construction of Power Transmission Line
Towers DLGJ136---1997***

Each electrical power design institute:

To adjust to the needs for the construction and development of electric power, our institute entrusts Northeast Electric Power Design Institute to draw up the *Regulation for Drawing and Construction of Power Transmission Line Towers DLGJ136---1997*. Upon organizational review, it is approved to be issued now and starts to be carried out since November 1, 1997. The original *Requirements on General Design and Drawing of Power Transmission Line Towers (75) Ji She Zi No. 26* is abolished simultaneously.

If each unit finds inappropriate places or those need to be supplemented during implementation, please inform our institute and Northeast Electric Power Design Institute that takes charge of daily management in time.

September 4, 1997

Foreword

Since the original *Requirements on General Design and Drawing of Power Transmission Line Towers* (75) Ji She Zi No. 26 of the Infrastructure Construction Department of the Ministry of Water Resources and Power was drawn up and issued, lots of changes have occurred to the practical situation and some new structural regulations are increased as required. Taking use of the experience for over 20 years in design, manufacture, construction and many other aspects, this Regulation revises and supplements the original *Requirements on General Design and Drawing of Power Transmission Line Towers*.

Northeast Electric Power Design Institute takes charge of the formulation, revision and concrete explanation of the Regulation. It is put under centralized management by the Electrical Planning and Design Institute of the Ministry of Electric Power Industry.

The editor of this Regulation is Northeast Electric Power Design Institute and the unit participating in its formulation is Central-South Electric Power Design Institute.

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1 General Rules

1.0.1 To make the drawing of power transmission line powers uniform, clear, simple so as to meet the requirements on design, manufacture and construction and adjust to the needs for power engineering construction, hereby draw up this Regulation.

1.0.2 This Regulation applies to the steel-tube structure of power transmission line towers and reinforced concrete poles as well as microwave towers.

1.0.3 CAD should be actively adopted for the drawing of towers.

1.0.4 Besides implementing this Regulation, the drawing of towers should also observe the provisions of current relevant national and industrial standards.

2 General Provisions

2.1 Drawing Breadth

2.1.1 The breadth of design drawings should comply with the provisions in Table 2.1.1.

Table 2.1.1 Drawing Specification

Code for Basic Breadth	0	1	2	3	4	5
(B)×(L)	841×1189	594×841	420×594	297×420	210×297	148×210
(c)	10			5		
(a)	25					

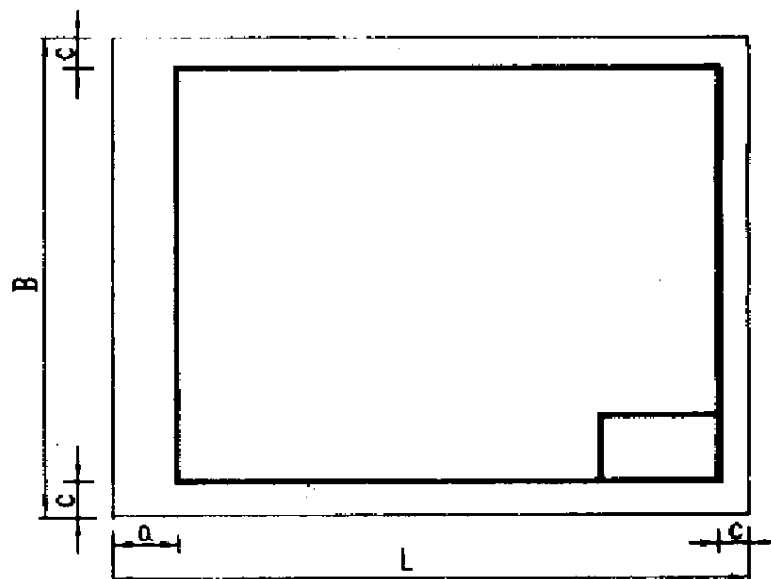


Figure 2.1.1

2.1.2 No. 0 breadth cannot be widened and No. 1, 2 and 3 breadths had better not be widened. The length can be lengthened as to the multiple of L/8 when necessary, but the maximum length shouldn't be over 1,931mm. The width can be widened as the multiple of B/8. No. 4 and 5 breadths cannot be widened and lengthened. No. 5 breadth is only used for drawing up the manual.

2.1.3 While selecting drawing breadth, the breadth of drawings in the same manual had better be with the same specification so as to avoid the mixture of large and small breadths.

2.2 Icons

2.2.1 Icons are designed according to engineering. For the icons of standard design (including typical or certain design), revise icons, translation icons, copy icons and countersign icons, their formats should comply with the *Measures for Management of Survey and Design Drawings in Power Engineering (DLGJ28)*.

The icons in No. 1, 2, 3 and 4 drawings (including vertical drawing) should be placed at the right lower corner of drawing.

2.3 Proportion

2.3.1 The proportion for drawing tower map had better be adopted according to Table 2.3.1.

Table 2.3.1 Proportion

Map Title	Common Proportion
Single line drawing	1: 100 1: 200 1: 300
Structural drawing: used for component axial line used for component contour line	1: 10 1: 20 1: 30 1: 15
Detailed drawing	1: 5 1: 10

2.3.2 While marking the proportion of detailed drawing or detailed enlarged drawing, draw 1 solid line under the detailed drawing or detailed enlarged drawing to mark the proportion adopted.

2.4 Measuring Unit

2.4.1 Arabic numerals should be adopted for all figures involving quantity in design drawing. The measuring units should comply with the provisions in the *Legal Units of Measurement of the People's Republic of China*.

2.4.2 The unit of dimensions marked in the drawing should be mm.

2.5 Line Type

Various line types in the drawing should comply with the provisions in Table 2.5.

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