

# ISO 37160:2020-03 (E)

## Smart community infrastructure - Electric power infrastructure - Measurement methods for the quality of thermal power infrastructure and requirements for plant operations and management

---

<b>Contents</b>	<b>Page</b>
<b>Foreword</b> .....	<b>iv</b>
<b>Introduction</b> .....	<b>v</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Evaluation indicators for the QTPI during the operational phase</b> .....	<b>3</b>
4.1 QTPI.....	3
4.2 Elements of the QTPI.....	4
4.2.1 General.....	4
4.2.2 Initial operation capability.....	4
4.2.3 Supply stability.....	4
4.2.4 Reliability (reliable operation and fast recovery).....	4
4.2.5 Environmental and social considerations.....	5
4.2.6 Safety.....	5
4.2.7 LCC.....	5
4.2.8 Performance indicators and evaluation of the QTPI.....	5
4.3 Evaluation indicators.....	5
4.3.1 Supply stability.....	5
4.3.2 Reliability (reliable operation and fast recovery): Forced outage rate (FOR).....	7
4.3.3 Environmental and social considerations.....	7
4.3.4 Safety: number of injuries caused by industrial safety accidents.....	10
4.3.5 LCC (LCC considering the five other elements of QTPI).....	10
<b>5 Operation of thermal power infrastructure</b> .....	<b>11</b>
5.1 General.....	11
5.2 Measurement.....	12
5.3 Data control.....	12
5.4 Analysis.....	13
5.5 Response to risks and opportunities.....	13
5.6 Operation control.....	14
5.7 Integrated management.....	14
<b>Annex A (informative) Example of an LCC formula considering all five other elements of QTPI</b> .....	<b>16</b>
<b>Bibliography</b> .....	<b>18</b>