**{{ farmName }}**

**风机能效评估与诊断报告**

**编制：{{ author }}**

**校核：{{ checker }}**

**审批：{{ approver }}**

**深圳量云能源网络科技有效公司**

**{{ createTime }}**

# 风场基本信息概述

|  |  |
| --- | --- |
| **风场** | {{ farmName }} |
| **风机数量** | {{ fanNum }}台 |
| **风机型号** | {{ fanModel }} |
| **数据日期** | {{ startTime }} 至 {{ endTime }} |

# 风场各机组能效评估总览

## 机组能效排行总览

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **排名** | **机组编号** | **能效偏差率**  **（%）** | **能量可利用率**  **（%）** | **理论发电量**  **（kW·h）** | **实际发电量**  **（kW·h）** |
| {%tr for item in energy\_coeff\_list %} | | | | | |
| {{ item[0] }} | {{ item[1] }} | {{ item[2] }} | {{ item[3] }} | {{ item[4] }} | {{ item[5] }} |
| {%tr endfor %} | | | | | |

{{ energy\_coeff\_str }}

## 机组风况总览

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **机组编号** | **平均风速**  **（m/s）** | **平均风功率**  **密度（kW/m2）** | **全风速段湍流强度** | **2.5-15风速段湍流强度** | **最大风速**  **（m/s）** |
| {%tr for item in wind\_flow\_list %} | | | | | |
| {{ item[0] }} | {{ item[1] }} | {{ item[2] }} | {{ item[3] }} | {{ item[4] }} | {{ item[5] }} |
| {%tr endfor %} | | | | | |

## 机组偏航诊断一览表

|  |  |  |  |
| --- | --- | --- | --- |
| **机组编号** | **偏航对风角度偏差（°）** | **偏航状态** | **偏航建议** |
| {%tr for item in yaw\_list %} | | | |
| {{ item[0] }} | {{ item[1] }} | {% cellbg item[2].bg %}{{ item[2].val }} | {{ item[3] }} |
| {%tr endfor %} | | | |

# 机组详细分析

{% for detail in turbine\_detail\_list %}

## {{ detail.farm\_turbine\_num }}

### 偏航对风模型

偏航分析：

{{ detail.yaw\_img }}

{{ detail.yaw\_desc }}

{% if detail.fault\_status %}

### 转矩模型

转矩分析：

{{ detail.torque\_img }}

{{ detail.torque\_desc }}

{% endif %}

{% endfor %}