

**Technical Rule no. 01 rev. 03  
MPE**

(under article 4 of the Integrated Text of the Electricity Market Rules, approved by the Decree of the Minister of Productive Activities of 19 December 2003, as subsequently amended and supplemented)

<b>Title</b>	<b>Solar Time and Daylight Saving Time in the MGP, MI and MSD</b>
Reference Legislation	Article 25, para. 25.1, Integrated Text of the Electricity Market Rules

**Updated on ...**

## 1. Foreword

Under Article 25, para. 25.1 of the Integrated Text of the Electricity Market Rules, the market time interval and the imbalance settlement period upon the change from solar time to daylight saving time and vice versa shall be defined in the Technical Rules.

The market time interval adopted for transactions in the Day-Ahead Market (MGP) and Intra-Day Market (MI) and the imbalance settlement period adopted for registrations on the PN are defined in Technical Rule no. 11 ME. For trading in the MGP and MI, it is necessary to specify the different market time intervals to be indicated in bids/offers upon the change from solar time to daylight saving time and vice versa, and the impact of such change on predefined bids/offers and margins.

## 2. Change from solar time to daylight saving time

At 02:00 of the last Sunday of March, the time will be moved forward by one hour (at 03:00), thus eliminating the hour from 02:00 to 03:00.

**- Market time interval of 15 minutes**

The last Sunday of March, composed of 23 hours, is divided into 92 market time intervals of 15 minutes in the markets where the 15-min product can be traded, as indicated in Technical Rule no. 05 MPE.

Market Time Interval	Start Time	End Time	Market Time Interval	Start Time	End Time	Market Time Interval	Start Time	End Time	Market Time Interval	Start Time	End Time
1	0:00	0:15	25	7:00	7:15	49	13:00	13:15	73	19:00	19:15
2	0:15	0:30	26	7:15	7:30	50	13:15	13:30	74	19:15	19:30
3	0:30	0:45	27	7:30	7:45	51	13:30	13:45	75	19:30	19:45
4	0:45	1:00	28	7:45	8:00	52	13:45	14:00	76	19:45	20:00
5	1:00	1:15	29	8:00	8:15	53	14:00	14:15	77	20:00	20:15
6	1:15	1:30	30	8:15	8:30	54	14:15	14:30	78	20:15	20:30
7	1:30	1:45	31	8:30	8:45	55	14:30	14:45	79	20:30	20:45
8	1:45	2:00	32	8:45	9:00	56	14:45	15:00	80	20:45	21:00
9	3:00	3:15	33	9:00	9:15	57	15:00	15:15	81	21:00	21:15
10	3:15	3:30	34	9:15	9:30	58	15:15	15:30	82	21:15	21:30
11	3:30	3:45	35	9:30	9:45	59	15:30	15:45	83	21:30	21:45
12	3:45	4:00	36	9:45	10:00	60	15:45	16:00	84	21:45	22:00
13	4:00	4:15	37	10:00	10:15	61	16:00	16:15	85	22:00	22:15
14	4:15	4:30	38	10:15	10:30	62	16:15	16:30	86	22:15	22:30
15	4:30	4:45	39	10:30	10:45	63	16:30	16:45	87	22:30	22:45
16	4:45	5:00	40	10:45	11:00	64	16:45	17:00	88	22:45	23:00
17	5:00	5:15	41	11:00	11:15	65	17:00	17:15	89	23:00	23:15
18	5:15	5:30	42	11:15	11:30	66	17:15	17:30	90	23:15	23:30
19	5:30	5:45	43	11:30	11:45	67	17:30	17:45	91	23:30	23:45
20	5:45	6:00	44	11:45	12:00	68	17:45	18:00	92	23:45	0:00
21	6:00	6:15	45	12:00	12:15	69	18:00	18:15			
22	6:15	6:30	46	12:15	12:30	70	18:15	18:30			
23	6:30	6:45	47	12:30	12:45	71	18:30	18:45			
24	6:45	7:00	48	12:45	13:00	72	18:45	19:00			

For instance:

- the eighth *quarter-hour* of the last Sunday of March will correspond to the quarter-hour from 01:45 to 02:00;
- the ninth *quarter-hour* of the last Sunday of March will correspond to the quarter-hour from 03:00 to 03:15;
- the tenth *quarter-hour* of the last Sunday of March will correspond to the quarter-hour from 03:15 to 03:30, and so on.

Accordingly, in the flow of data between GME, Terna, and Market Participants:

- for the **web form**, the first 92 fields that are available must be completed in sequential order (without skipping the ninth, tenth, eleventh, and twelfth field);
- for the **files.xml**, the sequential order of the quarter-hours must be maintained (e.g.: for referring bids/offers to the quarter-hour from 03:00 to 03:15, write <Period>**9**</Period> **and not** <Period>**13**</Period>).

#### - Market time interval of 30 minutes

The last Sunday of March, composed of 23 hours, is divided into 46 market time intervals of 30 minutes in the markets where the 30-min product can be traded, as indicated in Technical Rule no. 05 MPE.

Market Time Interval	Start ½ h	End	Market Time Interval	Start ½ h	End ½ h
1	00:00	00:30	24	12:30	13:00
2	00:30	01:00	25	13:00	13:30
3	01:00	01:30	26	13:30	14:00
4	01:30	02:00	27	14:00	14:30
5	03:00	03:30	28	14:30	15:00
6	03:30	04:00	29	15:00	15:30
7	04:00	04:30	30	15:30	16:00
8	04:30	05:00	31	16:00	16:30
9	05:00	05:30	32	16:30	17:00
10	05:30	06:00	33	17:00	17:30
11	06:00	06:30	34	17:30	18:00
12	06:30	07:00	35	18:00	18:30
13	07:00	07:30	36	18:30	19:00
14	07:30	08:00	37	19:00	19:30
15	08:00	08:30	38	19:30	20:00
16	08:30	09:00	39	20:00	20:30
17	09:00	09:30	40	20:30	21:00
18	09:30	10:00	41	21:00	21:30
19	10:00	10:30	42	21:30	22:00
20	10:30	11:00	43	22:00	22:30
21	11:00	11:30	44	22:30	23:00
22	11:30	12:00	45	23:00	23:30
23	12:00	12:30	46	23:30	00:00

For instance:

- the fourth half-hour of the last Sunday of March will correspond to the half-hour from 01:30 to 02:00;
- the fifth half-hour of the last Sunday of March will correspond to the half-hour from 03:00 to 03:30;
- the sixth half-hour of the last Sunday of March will correspond to the half-hour from 03:00 to 04:00, and so on.

Accordingly, in the flow of data between GME, Terna, and Market Participants:

- for the **web form**, the first 46 fields that are available must be completed in sequential order (without skipping the fifth and sixth field);
- for the **files.xml**, the sequential order of the half-hours must be maintained (e.g. for referring bids/offers to the half-hour from 03:00 to 03:30, write `<Period>5</Period>` **and not** `<Period>7</Period>`).
- **Market time interval of 60 minutes**

The last Sunday of March, composed of 23 hours, is divided into 23 hours in the markets where the hourly product can be traded, as indicated in Technical Rule no. 05 MPE.

Market Time Interval	Start h	End h	Market Time Interval	Start h	End h
1	00:00	01:00	13	13:00	14:00
2	01:00	02:00	14	14:00	15:00
3	03:00	04:00	15	15:00	16:00
4	04:00	05:00	16	16:00	17:00
5	05:00	06:00	17	17:00	18:00
6	06:00	07:00	18	18:00	19:00
7	07:00	08:00	19	19:00	20:00
8	08:00	09:00	20	20:00	21:00
9	09:00	10:00	21	21:00	22:00
10	10:00	11:00	22	22:00	23:00
11	11:00	12:00	23	23:00	24:00
12	12:00	13:00			

For instance:

- The second hour of the last Sunday of March will correspond to the hour from 01:00 to 02:00;;
- The third hour of the last Sunday of March will correspond to the hour from 03:00 to 04:00;
- The fourth hour of the last Sunday of March will correspond to the hour from 04:00 to 05:00, and so on.

Accordingly, in the flow of data between GME, Terna, and Market Participants:

- for the **web form**, the first 23 fields that are available must be completed in sequential order (without skipping the third);
- for the **files.xml**, the sequential order of the hours must be maintained (e.g. for referring bids/offers to the hour from 03:00 to 04:00, write <Hour>**3**</Hour> **and not** <Hour>**4**</Hour>).

### **3. Change from daylight saving time to solar time**

At 03:00 of the last Sunday of October, the time will be moved backward by one hour (at 02:00), thus duplicating the hour from 02:00 to 03:00.

#### **- Market time interval of 15 minutes**

The last Sunday of October, composed of 25 hours, is divided into 100 market time intervals of 15 minutes in the markets where the 15-min product can be traded, as indicated in Technical Rule no. 05 MPE.

Market Time Interval	Start Time	End Time	Market Time Interval	Start Time	End Time	Market Time Interval	Start Time	End Time	Market Time Interval	Start Time	End Time
<b>1</b>	0:00	0:15	<b>25</b>	5:00	5:15	<b>49</b>	11:00	11:15	<b>73</b>	17:00	17:15
<b>2</b>	0:15	0:30	<b>26</b>	5:15	5:30	<b>50</b>	11:15	11:30	<b>74</b>	17:15	17:30
<b>3</b>	0:30	0:45	<b>27</b>	5:30	5:45	<b>51</b>	11:30	11:45	<b>75</b>	17:30	17:45
<b>4</b>	0:45	1:00	<b>28</b>	5:45	6:00	<b>52</b>	11:45	12:00	<b>76</b>	17:45	18:00
<b>5</b>	1:00	1:15	<b>29</b>	6:00	6:15	<b>53</b>	12:00	12:15	<b>77</b>	18:00	18:15
<b>6</b>	1:15	1:30	<b>30</b>	6:15	6:30	<b>54</b>	12:15	12:30	<b>78</b>	18:15	18:30
<b>7</b>	1:30	1:45	<b>31</b>	6:30	6:45	<b>55</b>	12:30	12:45	<b>79</b>	18:30	18:45
<b>8</b>	1:45	2:00	<b>32</b>	6:45	7:00	<b>56</b>	12:45	13:00	<b>80</b>	18:45	19:00
<b>9</b>	2:00	2:15	<b>33</b>	7:00	7:15	<b>57</b>	13:00	13:15	<b>81</b>	19:00	19:15
<b>10</b>	2:15	2:30	<b>34</b>	7:15	7:30	<b>58</b>	13:15	13:30	<b>82</b>	19:15	19:30
<b>11</b>	2:30	2:45	<b>35</b>	7:30	7:45	<b>59</b>	13:30	13:45	<b>83</b>	19:30	19:45
<b>12</b>	2:45	3:00	<b>36</b>	7:45	8:00	<b>60</b>	13:45	14:00	<b>84</b>	19:45	20:00
<b>13</b>	2:00	2:15	<b>37</b>	8:00	8:15	<b>61</b>	14:00	14:15	<b>85</b>	20:00	20:15
<b>14</b>	2:15	2:30	<b>38</b>	8:15	8:30	<b>62</b>	14:15	14:30	<b>86</b>	20:15	20:30
<b>15</b>	2:30	2:45	<b>39</b>	8:30	8:45	<b>63</b>	14:30	14:45	<b>87</b>	20:30	20:45
<b>16</b>	2:45	3:00	<b>40</b>	8:45	9:00	<b>64</b>	14:45	15:00	<b>88</b>	20:45	21:00
<b>17</b>	3:00	3:15	<b>41</b>	9:00	9:15	<b>65</b>	15:00	15:15	<b>89</b>	21:00	21:15
<b>18</b>	3:15	3:30	<b>42</b>	9:15	9:30	<b>66</b>	15:15	15:30	<b>90</b>	21:15	21:30
<b>19</b>	3:30	3:45	<b>43</b>	9:30	9:45	<b>67</b>	15:30	15:45	<b>91</b>	21:30	21:45
<b>20</b>	3:45	4:00	<b>44</b>	9:45	10:00	<b>68</b>	15:45	16:00	<b>92</b>	21:45	22:00
<b>21</b>	4:00	4:15	<b>45</b>	10:00	10:15	<b>69</b>	16:00	16:15	<b>93</b>	22:00	22:15
<b>22</b>	4:15	4:30	<b>46</b>	10:15	10:30	<b>70</b>	16:15	16:30	<b>94</b>	22:15	22:30
<b>23</b>	4:30	4:45	<b>47</b>	10:30	10:45	<b>71</b>	16:30	16:45	<b>95</b>	22:30	22:45
<b>24</b>	4:45	5:00	<b>48</b>	10:45	11:00	<b>72</b>	16:45	17:00	<b>96</b>	22:45	23:00
									<b>97</b>	23:00	23:15
									<b>98</b>	23:15	23:30
									<b>99</b>	23:30	23:45
									<b>100</b>	23:45	0:00

For instance:

- the *twelfth quarter-hour* of the last Sunday of October will correspond to the quarter-hour from 02:45 to 03:00;
- the *thirteenth quarter-hour* of the last Sunday of October will correspond to the quarter-hour from 02:00 to 02:15;
- the *fourteenth quarter-hour* of the last Sunday of October will correspond to the quarter-hour from 02:15 to 02:30, and so on.

Accordingly, in the flow of data between GME, Terna, and Market Participants:

- for the **web form**, the available 100 fields must be completed in sequential order;
- for the **files.xml**, the quarter-hours must be indicated in sequential order (e.g.: for referring bids/offers to the quarter-hour from 03:00 to 03:15, write `<Period>17</Period>` **and not** `<Period>13</Period>`).

**- Market time interval of 30 minutes**

The last Sunday of October, composed of 25 hours, is divided into 50 market time intervals of 30 minutes in the markets where the 30-min product can be traded, as indicated in Technical Rule no. 05 MPE.

Market Time Interval	Start ½ h	End ½ h	Market Time Interval	Start ½ h	End ½ h
1	00:00	00:30	28	12:30	13:00
2	00:30	01:00	29	13:00	13:30
3	01:00	01:30	30	13:30	14:00
4	01:30	02:00	31	14:00	14:30
5	02:00	02:30	32	14:30	15:00
6	02:30	03:00	33	15:00	15:30
7	02:00	02:30	34	15:30	16:00
8	02:30	03:00	35	16:00	16:30
9	03:00	03:30	36	16:30	17:00
10	03:30	04:00	37	17:00	17:30
11	04:00	04:30	38	17:30	18:00
12	04:30	05:00	39	18:00	18:30
13	05:00	05:30	40	18:30	19:00
14	05:30	06:00	41	19:00	19:30
15	06:00	06:30	42	19:30	20:00
16	06:30	07:00	43	20:00	20:30
17	07:00	07:30	44	20:30	21:00
18	07:30	08:00	45	21:00	21:30
19	08:00	08:30	46	21:30	22:00
20	08:30	09:00	47	22:00	22:30
21	09:00	09:30	48	22:30	23:00
22	09:30	10:00	49	23:00	23:30
23	10:00	10:30	50	23:30	00:00
24	10:30	11:00			
25	11:00	11:30			
26	11:30	12:00			
27	12:00	12:30			



For instance:

- the sixth half-hour of the last Sunday of October will correspond to the half-hour from 02:30 to 03:00;
- the sixth half-hour of the last Sunday of October will correspond to the half-hour from 02:30 to 03:00;
- the eighth half-hour of the last Sunday of October will correspond to the half-hour from 02:30 to 03:00, and so on.

Accordingly, in the flow of data between GME, Terna, and Market Participants:

- for the **web form**, the first 50 fields that are available must be completed in sequential order;
- for the **files.xml**, the sequential order of the half-hours must be maintained (e.g. for referring bids/offers to the half-hour from 03:00 to 03:30, write `<Period>9</Period>` **and not** `<Period>7</Period>`).
- **Market time interval of 60 minutes**

The last Sunday of October, composed of 25 hours, is divided into 25 hours in the markets where the hourly product can be traded, as indicated in Technical Rule no. 05 MPE.

Market Time Interval	Start h	End h	Market Time Interval	Start h	End h
1	00:00	01:00	13	11:00	12:00
2	01:00	02:00	14	12:00	13:00
3	02:00	03:00	15	13:00	14:00
4	02:00	03:00	16	14:00	15:00
5	03:00	04:00	17	15:00	16:00
6	04:00	05:00	18	16:00	17:00
7	05:00	06:00	19	17:00	18:00
8	06:00	07:00	20	18:00	19:00
9	07:00	08:00	21	19:00	20:00
10	08:00	09:00	22	20:00	21:00
11	09:00	10:00	23	21:00	22:00
12	10:00	11:00	24	22:00	23:00
			25	23:00	24:00

For instance:

- The *third imbalance settlement period* of the last Sunday of October will correspond to the hour from 02:00 to 03:00;
- The *fourth imbalance settlement period* of the last Sunday of October will correspond to the hour from 02:00 to 03:00;
- The *fifth imbalance settlement period* of the last Sunday of October March will correspond to the hour from 03:00 to 04:00, and so on.

Accordingly, in the flow of data between GME, Terna, and Market Participants:

- for the **web form**, the first 25 available fields must be completed in sequential order;
- for the **files.xml**, the sequential order of the hours must be maintained (e.g. for referring bids/offers to the hour from 03:00 to 04:00, write `<Hour>5</Hour>` **and not** `<Hour>4</Hour>`).

#### **4. Impact of the change of time on submission of margins**

When passing from daylight saving time to solar time and vice versa, Terna or the BRPs must submit their margins for the MGP, updated with reference both to the day when the change occurs and to the next day. In particular, upon the day of the change, the BRPs must submit their margins specifying 23 or 25 market time intervals and, on the next day, they must submit their margins again specifying 24 market time intervals. This procedure prevents the Electricity Market Information System (SIME<sup>1</sup>) from re-using the margins pertaining to the previous day and from assigning to the different hours the margins originally specified by Market Participants for other hours and, upon the change to solar time, from rejecting bids/offers relating to the fourth market time interval as technically inadequate.

#### **5. Impact of the change of time on pre-defined bids/offers**

When passing from daylight saving time to solar time and vice versa, Market Participants must submit updated bids/offers into the MGP to replace their pre-defined bids/offers; in particular, they must submit bids/offers specifying 23 or 25 market time intervals, as the case may be. This procedure prevents SIME from assigning to the different hours with the price-quantity values originally specified by Market Participants for other hours and, upon the change to solar time, from assigning no value to the fourth minimum market interval.

---

<sup>1</sup> SIME: “Sistema Informatico del Mercato Elettrico” – information system through which GME collects demand bids and supply offers, defines market results, and makes available preliminary information and results.