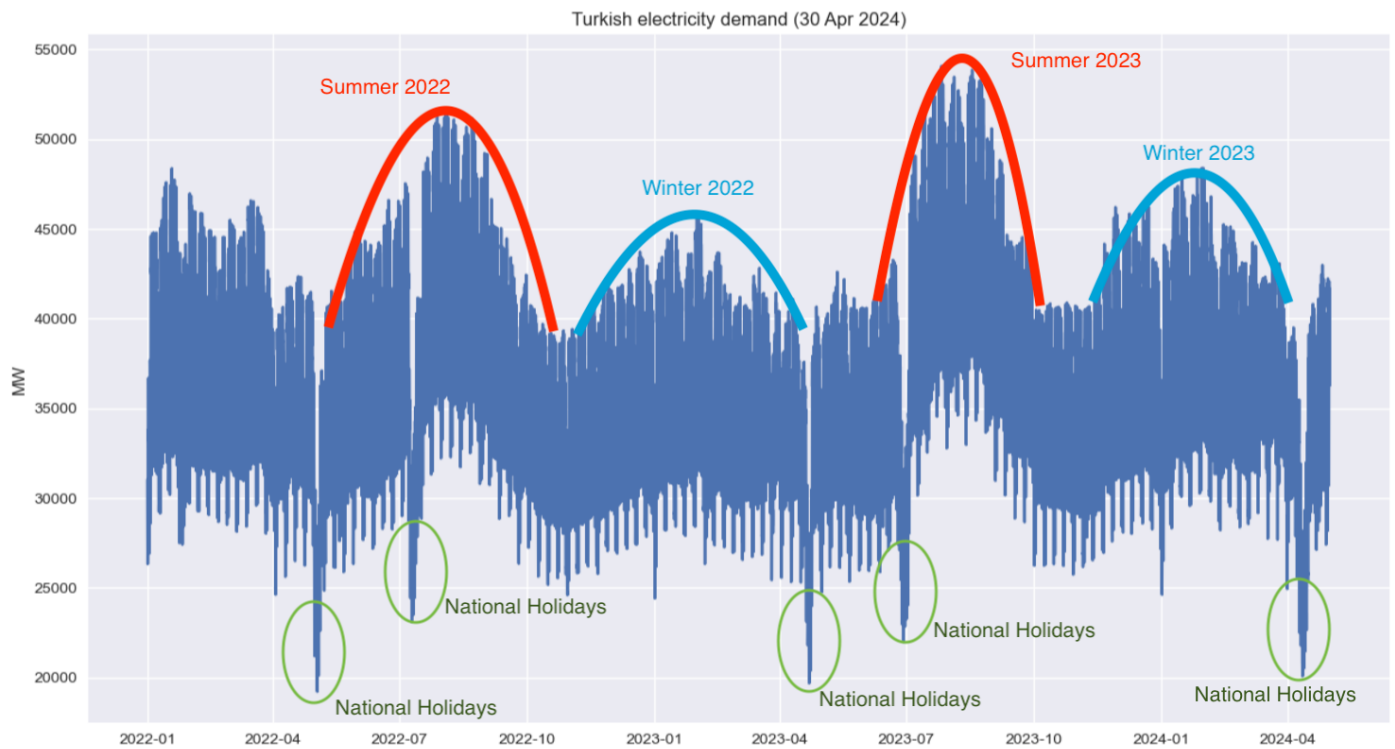


Why 2nd Day of Eid is Always the Lowest Demand in Türkiye?

This is not the most interesting enigmas of the Turkish power demand. Power sector professionals know that the lowest demand is happening during Eids, Islamic holidays (“Bayram”) in Türkiye. But even most are not aware that, it is not the first morning of the Eid that has the lowest demand. Generally, 2nd morning of the Eid sees the lowest demand of all the year. Why?

Short answer, because there are lots of activities like morning Eid prayer services and traditional breakfasts or prolonged early morning activities. But in the morning of the second day all these activities fizzes out. This creates the “2nd day lowest demand” effect, not the 1st day.

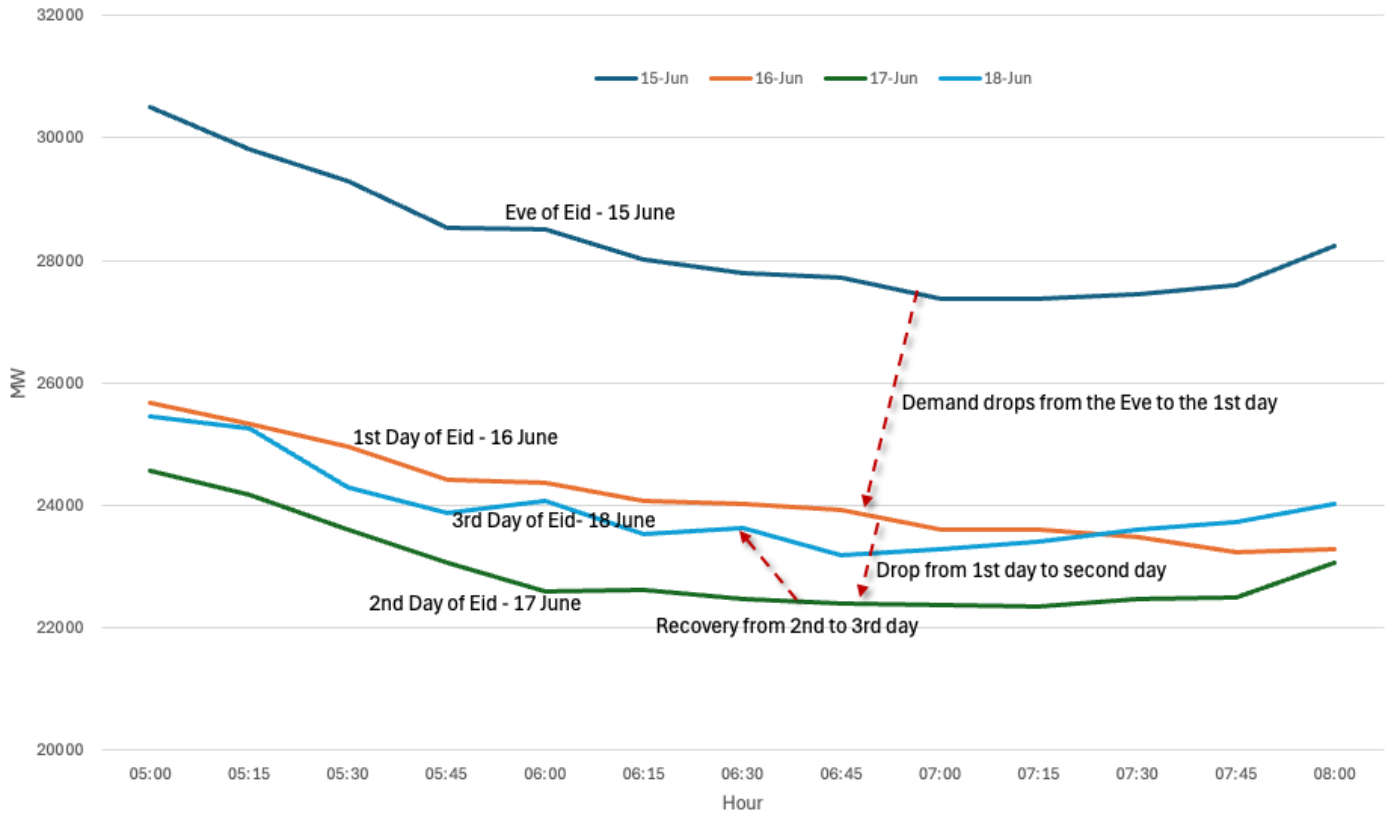


In the previous note, these national holidays of 9 days have been spotted with green circles to underline how low the demand is during those days. There are two religious holidays celebrated in Türkiye every year. These holidays are timed according to Moon calendar. So they shift 10 days every year. This note will concentrate on the 16-20th June, Eid Al Adha (“Kurban Bayramı”).

On the Eve of Eid, the lowest demand has happened around 7:00 o’clock. On the first day of the Eid the demand has decreased until 08:00 o’clock. On the second day it happened on 07:15. On the third day, 18th of June, the demand recovered but this time the lowest demand happened at 06:45. So there is not one consistent trend.

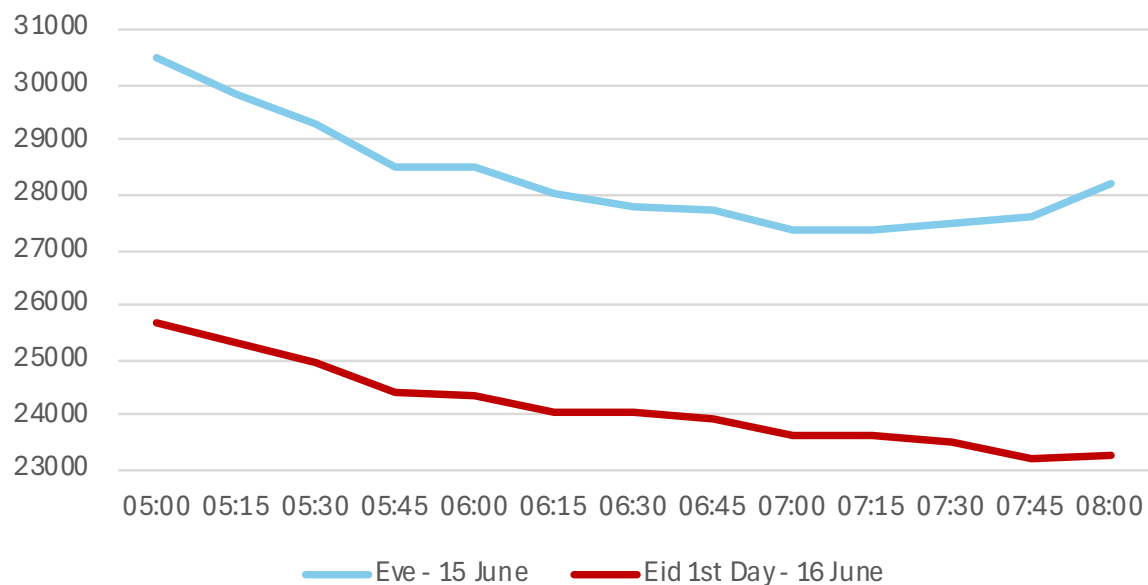
On the 1st Day of Eid, demand is higher than expected for a typical first day of a holiday. It can be assumed there may be still people trying to get to their destination on the early morning of Eid. Also there is an activity until 06:45. The reason for that is, traditionally the prayers for Eids are attended by all the male participants of a home, afterwards people continue with their breakfast or religious duties.

Lowest Demand in Türkiye - Why on the 2nd day of holiday?



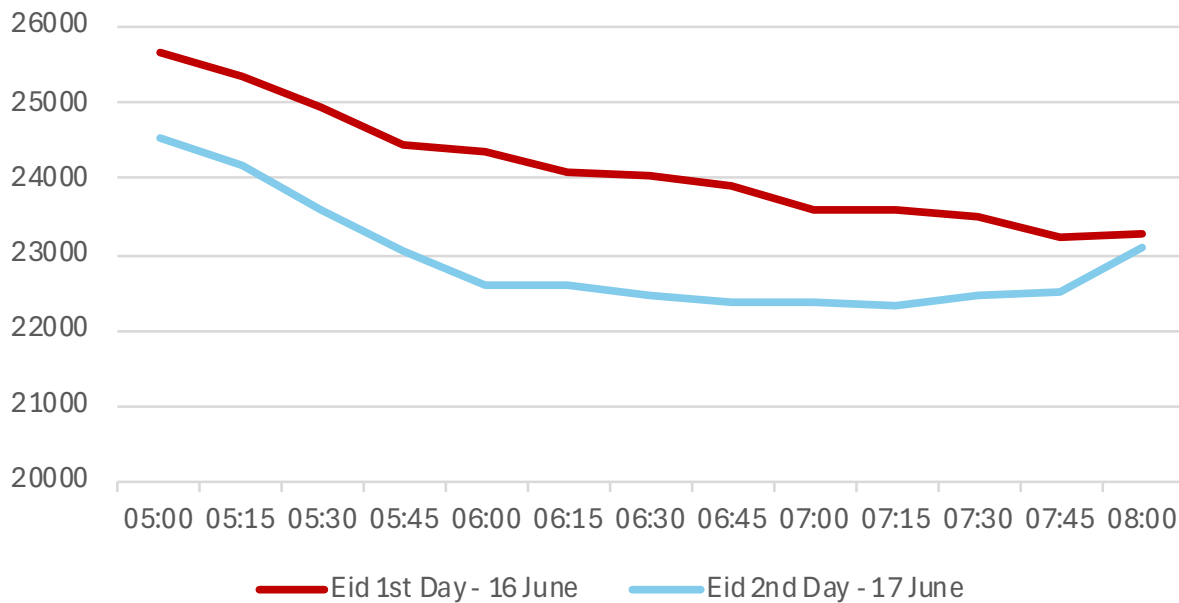
Therefore, the first morning of the Eid is an active period in Türkiye. This activity is still visible compared to not only 2nd day but the 3rd day of Eid, too. If the days are compared separately, effect is much more visible. Between Eve and 1st day, there is a little pick up between 06:15-06:45, this can be a post prayer service effect. Also the steepness of 05:00-05:45 is different for two days.

Eve and the 1st Morning of Eid



The same comparison can be carried out between 1st and 2nd days too. This time the decrease in demand is much more visible. The period between 05:45 to 06:45 on the first day of Eid is clearly more active than the 2nd day. The demand has shifted around 5000 MW downwards between two days.

1st and 2nd Morning of Eid



In the second day of Eid, the decrease in demand is much steeper, the plateau of 06:00-07:45 is much more visible and after 07:45, there is a pick up – wake up probably.

Therefore, the lowest demand is observed on the 2nd day of Eid. Probably everyone is so tired on the 1st day, they can not wake up for the 2nd day.

Data Sources:

<https://ytbsbilgi.teias.gov.tr/>