

Общие параметры

Активная база данных: 1    Потребитель: Молодежная 5  
Поставщик:

| Дата        | БД  | НС  |
|-------------|-----|-----|
| 23.02.21    | 1   |     |
| 24.02.21    | 1   |     |
| 25.02.21    | 1   |     |
| 26.02.21    | 1   |     |
| 27.02.21    | 1   |     |
| 28.02.21    | 1   |     |
| 01.03.21    | 1   |     |
| 02.03.21    | 1   |     |
| 03.03.21    | 1   |     |
| 04.03.21    | 1   |     |
| 05.03.21    | 1   |     |
| 06.03.21    | 1   |     |
| 07.03.21    | 1   |     |
| 08.03.21    | 1   |     |
| 09.03.21    | 1   |     |
| 10.03.21    | 1   |     |
| 11.03.21    | 1   |     |
| 12.03.21    | 1   |     |
| 13.03.21    | 1   |     |
| 14.03.21    | 1   |     |
| 15.03.21    | 1   |     |
| 16.03.21    | 1   |     |
| 17.03.21    | 1   |     |
| 18.03.21    | 1   |     |
| 19.03.21    | 1   |     |
| 20.03.21    | 1   |     |
| 21.03.21    | 1   |     |
| 22.03.21    | 1   |     |
| Среднее     | --- | --- |
| Итого       | --- | --- |
| На 23.02.21 | --- | --- |
| На 22.03.21 | --- | --- |

Ответственный за учет \_\_\_\_\_

Отчет принят " \_\_ " \_\_\_\_\_ 20\_\_ г. \_\_\_\_\_ / \_\_\_\_\_ /

Тепловой ввод 1. Схема 3

Активная база данных: 1 Потребитель: Молодежная 5  
Поставщик:

| Дата        | Схема | Qo,<br>Гкал | Qr,<br>Гкал | M1,<br>т  | M2,<br>т  | M3,<br>т | Mr,<br>т | V1,<br>м3 | V2,<br>м3 | V3,<br>м3 | dV,<br>м3 | t1,<br>°C | t2,<br>°C | t3,<br>°C | dt,<br>°C | P1,<br>кгс/см2 | P2,<br>кгс/см2 | ВНП,<br>ч | ВОС,<br>ч | HC<br>Qo | HC<br>Qr | HC<br>M1 | HC<br>M2 | HC<br>M3 | HC<br>Mr | HC<br>V1 | HC<br>V2 | HC<br>V3 | HC<br>t1 | HC<br>t2 | HC<br>t3 | HC<br>dt | HC<br>P1 | HC<br>P2 |
|-------------|-------|-------------|-------------|-----------|-----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|----------------|-----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 23.02.21    | 3     | 4,223       | 0,000       | 81,610    | 75,230    | 0,000    | 6,380    | 85,120    | 76,190    | 0,000     | 8,930     | 99,67     | 51,61     | 51,59     | 48,06     | 6,480          | 5,980          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 24.02.21    | 3     | 4,812       | 0,000       | 83,010    | 77,580    | 0,000    | 5,430    | 87,260    | 78,730    | 0,000     | 8,530     | 109,71    | 55,18     | 55,17     | 54,53     | 6,560          | 6,020          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 25.02.21    | 3     | 4,053       | 0,000       | 83,860    | 78,320    | 0,000    | 5,540    | 87,310    | 79,350    | 0,000     | 7,960     | 97,35     | 52,19     | 52,10     | 45,16     | 6,520          | 5,970          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 26.02.21    | 3     | 4,225       | 0,000       | 83,220    | 77,850    | 0,000    | 5,370    | 86,790    | 78,810    | 0,000     | 7,980     | 99,89     | 52,24     | 52,23     | 47,65     | 6,500          | 5,970          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 27.02.21    | 3     | 4,545       | 0,000       | 82,660    | 76,870    | 0,000    | 5,790    | 86,550    | 77,860    | 0,000     | 8,690     | 104,89    | 53,42     | 53,42     | 51,47     | 6,550          | 6,020          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 28.02.21    | 3     | 4,473       | 0,000       | 82,530    | 76,390    | 0,000    | 6,140    | 86,320    | 77,350    | 0,000     | 8,970     | 103,34    | 52,77     | 52,76     | 50,57     | 6,480          | 5,960          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 01.03.21    | 3     | 4,509       | 0,000       | 81,760    | 76,610    | 0,000    | 5,150    | 85,650    | 77,630    | 0,000     | 8,020     | 105,27    | 53,27     | 53,27     | 52,00     | 6,540          | 6,020          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 02.03.21    | 3     | 4,414       | 0,000       | 84,590    | 78,210    | 0,000    | 6,380    | 88,390    | 79,280    | 0,000     | 9,110     | 101,90    | 53,48     | 53,44     | 48,42     | 6,520          | 5,970          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 03.03.21    | 3     | 4,297       | 0,000       | 82,980    | 77,670    | 0,000    | 5,310    | 86,670    | 78,690    | 0,000     | 7,980     | 101,67    | 53,07     | 53,06     | 48,60     | 6,500          | 5,960          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 04.03.21    | 3     | 3,705       | 0,000       | 83,500    | 77,390    | 0,000    | 6,110    | 86,520    | 78,310    | 0,000     | 8,210     | 90,71     | 49,63     | 49,63     | 41,08     | 6,520          | 5,980          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 05.03.21    | 3     | 2,907       | 0,000       | 83,320    | 77,130    | 0,000    | 6,190    | 85,580    | 77,900    | 0,000     | 7,680     | 77,32     | 45,42     | 45,39     | 31,90     | 6,490          | 5,960          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 06.03.21    | 3     | 2,575       | 0,000       | 81,750    | 73,960    | 0,000    | 7,790    | 83,610    | 74,560    | 0,000     | 9,050     | 70,04     | 42,06     | 42,03     | 27,98     | 6,450          | 5,970          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 07.03.21    | 3     | 2,421       | 0,000       | 77,440    | 71,400    | 0,000    | 6,040    | 79,170    | 71,930    | 0,000     | 7,240     | 69,74     | 41,27     | 41,26     | 28,47     | 6,450          | 6,010          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 08.03.21    | 3     | 2,804       | 0,000       | 79,190    | 71,950    | 0,000    | 7,240    | 81,240    | 72,640    | 0,000     | 8,600     | 75,25     | 43,30     | 43,29     | 31,95     | 6,430          | 5,970          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 09.03.21    | 3     | 2,771       | 0,000       | 79,220    | 72,520    | 0,000    | 6,700    | 81,230    | 73,240    | 0,000     | 7,990     | 75,01     | 43,22     | 43,22     | 31,79     | 6,460          | 5,990          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 10.03.21    | 3     | 2,920       | 0,000       | 79,140    | 73,070    | 0,000    | 6,070    | 81,330    | 73,790    | 0,000     | 7,540     | 78,57     | 44,73     | 44,72     | 33,84     | 6,440          | 5,960          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 11.03.21    | 3     | 2,661       | 0,000       | 79,750    | 73,150    | 0,000    | 6,600    | 81,690    | 73,820    | 0,000     | 7,870     | 73,42     | 43,16     | 43,14     | 30,26     | 6,480          | 6,000          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 12.03.21    | 3     | 2,655       | 0,000       | 80,150    | 74,540    | 0,000    | 5,610    | 82,150    | 75,220    | 0,000     | 6,930     | 74,12     | 43,72     | 43,70     | 30,40     | 6,440          | 5,950          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 13.03.21    | 3     | 3,238       | 0,000       | 79,300    | 74,320    | 0,000    | 4,980    | 81,830    | 75,050    | 0,000     | 6,780     | 84,96     | 46,76     | 46,76     | 38,20     | 6,510          | 6,010          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 14.03.21    | 3     | 3,700       | 0,000       | 82,320    | 76,830    | 0,000    | 5,490    | 85,330    | 77,780    | 0,000     | 7,550     | 91,35     | 49,40     | 49,39     | 41,95     | 6,530          | 6,020          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 15.03.21    | 3     | 3,717       | 0,000       | 83,360    | 79,310    | 0,000    | 4,050    | 86,500    | 80,280    | 0,000     | 6,220     | 93,23     | 50,93     | 50,88     | 42,30     | 6,550          | 6,020          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 16.03.21    | 3     | 3,469       | 0,000       | 85,110    | 80,500    | 0,000    | 4,610    | 88,040    | 81,420    | 0,000     | 6,620     | 88,36     | 50,08     | 50,03     | 38,28     | 6,570          | 6,020          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 17.03.21    | 3     | 3,154       | 0,000       | 82,560    | 78,270    | 0,000    | 4,290    | 85,100    | 79,120    | 0,000     | 5,980     | 83,26     | 47,24     | 47,21     | 36,02     | 6,500          | 5,980          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 18.03.21    | 3     | 3,035       | 0,000       | 82,990    | 78,170    | 0,000    | 4,820    | 85,400    | 78,960    | 0,000     | 6,440     | 80,63     | 46,48     | 46,47     | 34,15     | 6,510          | 6,000          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 19.03.21    | 3     | 2,876       | 0,000       | 82,510    | 77,770    | 0,000    | 4,740    | 84,750    | 78,500    | 0,000     | 6,250     | 77,97     | 45,42     | 45,41     | 32,55     | 6,510          | 6,010          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 20.03.21    | 3     | 2,530       | 0,000       | 81,700    | 76,110    | 0,000    | 5,590    | 83,600    | 76,850    | 0,000     | 6,750     | 71,18     | 42,75     | 42,73     | 28,43     | 6,490          | 6,010          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 21.03.21    | 3     | 2,560       | 0,000       | 83,880    | 76,560    | 0,000    | 7,320    | 85,750    | 77,310    | 0,000     | 8,440     | 70,06     | 42,82     | 42,81     | 27,24     | 6,480          | 5,990          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 22.03.21    | 3     | 2,379       | 0,000       | 81,450    | 76,340    | 0,000    | 5,110    | 83,240    | 77,090    | 0,000     | 6,150     | 69,45     | 42,60     | 42,59     | 26,85     | 6,480          | 5,990          | 24,00     | 0,00      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| Среднее     | 3     | 3,415       | 0,000       | 81,959    | 76,215    | 0,000    | 5,744    | 84,719    | 77,059    | 0,000     | 7,659     | 86,37     | 47,79     | 47,77     | 38,57     | 6,498          | 5,990          | 24,00     | 0,00      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      |
| Итого       | 3     | 95,628      | 0,000       | 2294,860  | 2134,020  | 0,000    | 160,840  | 2372,120  | 2157,660  | 0,000     | 214,460   | 86,37     | 47,79     | 47,77     | 38,57     | 6,498          | 5,990          | 672,00    | 0,00      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      |
| На 23.02.21 | 3     | 2244,082    | 57,055      | 60819,690 | 54891,170 | 1026,020 | 5928,520 | 62581,770 | 55465,930 | 1043,290  | 7115,840  | 99,45     | 51,96     | 51,96     | 47,49     | 6,500          | 5,980          | 23962,00  | 8280,00   | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      |
| На 22.03.21 | 3     | 2339,710    | 57,055      | 63114,550 | 57025,190 | 1026,020 | 6089,360 | 64953,890 | 57623,590 | 1043,290  | 7330,300  | 69,45     | 42,60     | 42,59     | 26,85     | 6,480          | 5,990          | 24634,00  | 8280,00   | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      | ---      |

Ответственный за учет \_\_\_\_\_

Отчет принят " \_\_ " \_\_\_\_\_ 20 \_\_ г. \_\_\_\_\_ / \_\_\_\_\_ /

## Тепловой ввод 2. Схема 9

Активная база данных: 1 Потребитель: Молодежная 5  
Поставщик:

| Дата        | Схема | V1,<br>м3 | V2,<br>м3 | dV,<br>м3 | ВНР,<br>ч | ВОС,<br>ч | НС<br>V1 | НС<br>V2 |
|-------------|-------|-----------|-----------|-----------|-----------|-----------|----------|----------|
| 23.02.21    | 9     | 0,360     | 14,180    | -13,820   | 24,00     | 0,00      | 0        | 0        |
| 24.02.21    | 9     | 0,110     | 12,160    | -12,050   | 24,00     | 0,00      | 0        | 0        |
| 25.02.21    | 9     | 2,130     | 11,510    | -9,380    | 24,00     | 0,00      | 0        | 0        |
| 26.02.21    | 9     | 0,000     | 11,180    | -11,180   | 24,00     | 0,00      | 0        | 0        |
| 27.02.21    | 9     | 0,000     | 12,210    | -12,210   | 24,00     | 0,00      | 0        | 0        |
| 28.02.21    | 9     | 0,000     | 12,970    | -12,970   | 24,00     | 0,00      | 0        | 0        |
| 01.03.21    | 9     | 0,050     | 11,400    | -11,350   | 24,00     | 0,00      | 0        | 0        |
| 02.03.21    | 9     | 0,000     | 13,360    | -13,360   | 24,00     | 0,00      | 0        | 0        |
| 03.03.21    | 9     | 0,000     | 11,450    | -11,450   | 24,00     | 0,00      | 0        | 0        |
| 04.03.21    | 9     | 0,000     | 11,970    | -11,970   | 24,00     | 0,00      | 0        | 0        |
| 05.03.21    | 9     | 3,610     | 11,780    | -8,170    | 24,00     | 0,00      | 0        | 0        |
| 06.03.21    | 9     | 8,090     | 13,320    | -5,230    | 24,00     | 0,00      | 0        | 0        |
| 07.03.21    | 9     | 6,150     | 12,320    | -6,170    | 24,00     | 0,00      | 0        | 0        |
| 08.03.21    | 9     | 0,160     | 13,110    | -12,950   | 24,00     | 0,00      | 0        | 0        |
| 09.03.21    | 9     | 0,000     | 12,140    | -12,140   | 24,00     | 0,00      | 0        | 0        |
| 10.03.21    | 9     | 0,000     | 11,440    | -11,440   | 24,00     | 0,00      | 0        | 0        |
| 11.03.21    | 9     | 0,000     | 12,160    | -12,160   | 24,00     | 0,00      | 0        | 0        |
| 12.03.21    | 9     | 0,000     | 11,500    | -11,500   | 24,00     | 0,00      | 0        | 0        |
| 13.03.21    | 9     | 0,000     | 11,630    | -11,630   | 24,00     | 0,00      | 0        | 0        |
| 14.03.21    | 9     | 0,000     | 14,020    | -14,020   | 24,00     | 0,00      | 0        | 0        |
| 15.03.21    | 9     | 0,000     | 10,280    | -10,280   | 24,00     | 0,00      | 0        | 0        |
| 16.03.21    | 9     | 0,000     | 10,760    | -10,760   | 24,00     | 0,00      | 0        | 0        |
| 17.03.21    | 9     | 0,000     | 9,000     | -9,000    | 24,00     | 0,00      | 0        | 0        |
| 18.03.21    | 9     | 0,000     | 11,890    | -11,890   | 24,00     | 0,00      | 0        | 0        |
| 19.03.21    | 9     | 0,000     | 11,630    | -11,630   | 24,00     | 0,00      | 0        | 0        |
| 20.03.21    | 9     | 0,000     | 12,190    | -12,190   | 24,00     | 0,00      | 0        | 0        |
| 21.03.21    | 9     | 0,000     | 15,630    | -15,630   | 24,00     | 0,00      | 0        | 0        |
| 22.03.21    | 9     | 0,000     | 11,130    | -11,130   | 24,00     | 0,00      | 0        | 0        |
| Среднее     | 9     | 0,738     | 12,083    | -11,345   | 24,00     | 0,00      | ---      | ---      |
| Итого       | 9     | 20,660    | 338,320   | -317,660  | 672,00    | 0,00      | ---      | ---      |
| На 23.02.21 | 9     | 9566,110  | 12824,610 | -3258,500 | 32242,00  | 0,00      | ---      | ---      |
| На 22.03.21 | 9     | 9586,770  | 13162,930 | -3576,160 | 32914,00  | 0,00      | ---      | ---      |

Ответственный за учет \_\_\_\_\_

Отчет принят "\_\_\_" \_\_\_\_\_ 20\_\_ г. \_\_\_\_\_ / \_\_\_\_\_ /

## Принятые обозначения

### Измеряемые параметры

**Qo** - тепловая энергия полная, Гкал (ГДж, MWh)

**Qr** - тепловая энергия в трубопроводе 3, соответствующая Mr, Гкал (ГДж, MWh)

**Mi** - масса воды в i-ом трубопроводе, т

**Mr** - масса воды, отобранной из системы (разность значений M1-M2), т

**Gi** - объемный расход в i-ом трубопроводе, м³/ч

**ti** - температура теплоносителя в i-ом трубопроводе, °C

**dt** - разность температур теплоносителя, °C

**Pi** - давление теплоносителя в i-ом трубопроводе, кгс/см² (МПа, bar)

**tw** - температура воздуха, °C

**twх** - температура холодной воды, °C

**ВНР** - время нормальной работы, ч

**ВОС** - время отсутствия счета, ч