# DEVELOPMENT OF AN ALGORITHM FOR SWITCHING DISTRIBUTION FEEDERS TO AVOID FREQUENT UNDER FREQUENCY TRIPS IN A POWER SYSTEM

**By**

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# Declaration

This is to certify that this research work has been performed by me and it has not been submitted elsewhere for the award of any degree or diploma excepting for publication.

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# Dedication

*Dedicated to my parents.*

# Abstract

Though load shedding is not expected in modern days, depending upon the situation it may become unavoidable to prevent the power system from facing total blackout or to combat the under frequency problem in contingency situation or sustained generation deficit in the system. A good load shedding procedure may decrease the inconvenience when generation is remarkably less than demand.

In this work an algorithm has been developed to decide in advance or just prior to the required period a schedule for manual load shedding for 11 kV feeders so that occurrence of under frequency in thy system is reduced. In this algorithm emergency power requirement of customers under different feeders, the individual feeder priority and previous status have been considered. It has also been considered that a feeder will not be shed for two consecutive time slots. The algorithm finds the best combination from a set of candidate combinations (equal to the number of slots) based on several key indices.

The outcome of this study will help the distribution agencies prepare an easy-to-implement load shedding schedule especially if the number of 11 kV feeders in a 33/11 kV substation is too large to be switched on/off optimally applying only thumb rules.

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# List of Principal Symbols and Abbreviations

| | |
|---|---|
| $A_t$ | Allocation of power for distribution at t-th hour |
| $L_{i,t}$ | Demand of i-th feeder at t-th hour |
| $RLS_t$ | Required load shed amount at t-th hour |
| $ALS_t$ | Actual load shed amount at t-th hour |
| $SL_t$ | Served load at t-th hour |
| $U_{i,t}$ | On/Off status of i-th feeder at t-th hour |
| $\Delta A$ | Tolerance allowed in load shed amount i.e. by this amount served load can differ from allocation. |
| N | Number of feeders |
| T | Number of time slots |
| $E_{i,t}$ | Emergency status of i-th feeder at t-th hour |
| $M_{i,t}$ | Must-on status of i-th feeder at t-th hour |
| $P_{i,t}$ | Priority of i-th feeder at t-th hour |
| $UR_{i,j,k}$ | On/Off status of i-th feeder at t-th hour of k-th combination |
| SEA | Served-load Exceeds Allocation |
| SEAMax | Maximum Served-load Exceeds Allocation |
| SEACount | Count of Served-load Exceeds Allocation |
| ENS | Energy Not Served |

Continued

| | |
|---|---|
| kV | Kilo Volt |
| DPDC | Dhaka Power Distribution Company |
| MW | Mega Watt |
| MWH | Mega Watt-Hour |
| BPDB | Bangladesh Power Development Board |
| PGCB | Power Grid Company of Bangladesh |
| REB | Rural Electrification Board |
| DESCO | Dhaka Electricity Supply Company |
| WZPDC | West Zone Power Distribution Company |
| NLDC | National Load Dispatch Centre |
| SS | Sub-station |

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# Chapter 1: Introduction

## 1.1 General Consideration

The demand for electricity, the most convenient form of energy, is increasing day by day. But the supply, which is largely dependent upon the utility generation for various reasons, is not increasing at the same rate in our country. This impacts the power system operation adversely manifested in the form of under frequency and under voltage. While the under voltage can be addressed by increasing the tolerance margin (e.g. 20% instead of 10%) as practiced in Bangladesh and some other developing countries, frequency must be maintained within ±1% to 2% of the nominal frequency else the system stability cannot be maintained. Therefore, load management becomes inevitable specially in a power system with a regular generation deficit. In developing countries this is usually done in the form of switching off the distribution feeders from the substation end which is often termed load shedding.

## 1.2 Review of Literature

A good deal of research work [1-15] has been done on load management with various objectives.

In the work [1] authors have focused on load shedding for preventing voltage collapse in the contingency situation of the power system.

In the work [2] authors have proposed an expert system for load shedding in two stages: (i) quick and conservative estimation of the amount of load to be shed, (ii) based on available optimization alternatives and the status of the power system network flow optimization and restoration of fractions of the load that are shed.

In the work [3] a modified Optimal Power Flow (OPF) model is proposed as a tool for Interruptible Load Management (ILM). In this paper authors have proposed short-term benefits (Spot Price) and long term benefits (Discounts on Demand-Charges) for the ILM participants. Interruptible loads have been distinguished depending on the power factor of the load, advance notification, duration of the curtailment and also some network constraints and dynamic restrictions on generators viz. ramp-rate limits.

In the work [4] customer interruption cost model is used to optimize load shedding and minimize customers' grievances.

In the work [5] authors have compared various load control options offered at both wholesale and retail levels in various areas of North America in a deregulated power system environment. Most of the used schemes are economics based and are designed to minimize price spikes when load demand is relatively high compared to reasonably priced available generation. These programs provide various incentives for end users to reduce load or use on-site generation during high price periods. In Alberta Load Curtailment Program, Demand Opportunity Service and Supplemental Reserves are in practice for load management. California uses Participating Load Program, Demand Bidding Program, Critical Peak Pricing and Scheduled Load Reduction Program. Some other load management programs are in use in New York and Texas.

In the work [6] a linear programming model has been developed to change the system peak. Two load groups have been considered for load control program, a) Commercial/Industrial Load Control (CILC) and b) Residential Load Control (RLC). For each control program payback effect has been considered.

In the work [7] authors have proposed a distributed load shedding scheme based on real time synchronized frequency acquired from Frequency Disturbance Recorder (FDR) located at various spaces of a power system. This scheme is to improve load shedding operation and to shed optimal amount of load taking into account simultaneous frequency measurements from various buses along with operating conditions. Frequency as well as the rate of change of frequency are used to measure the load shed amount and to identify the bus where it is to be shed.

In the work [8] authors have proposed centralized adaptive load-shedding schemes. The objective is to protect system stability and prevent system collapse for major system disturbances or occurrence of subsequent events after the initial disturbance. This centralized algorithm selects the loads to be shed based on the magnitude of sub-transmission bus voltages and also static voltage stability.

In the work [9] optimization of load to be shed is performed by using linear programming method. It calculates the amount of load to be shed and identifies the buses that can be selected for shedding by minimizing cost for auto load shedding through under frequency relays. Bus voltage is also taken care of while selecting buses for shedding.

In the work [10] authors have proposed a procedure to be applied on the economical dispatch solution in order to check the voltage security level, and in case of necessity to improve it to meet a desired criterion. It applies load shedding to prevent a system blackout only for extreme situations of negative margin. This methodology improves system security and voltage stability margin by the means of active and reactive re-scheduling and load shedding only for emergency situations.

In the work [11] authors have proposed an efficient computational method, which is based on the chronological Monte Carlo approach for determining the settings of the under frequency load shedding relays and the level of the available spinning reserve in an autonomous power systems. It uses under frequency level, rate of change of frequency, time delay, load to shed as parameters for deciding which loads are to be shed.

In the work [12] authors have proposed a Distributed Interruptible Load Shedding (DILS) program in network contingency situations. It assumes that load can be divided into interruptible and non-interruptible loads. A cost function is proposed, which includes cost constants per-kWh costs on the distributor's (energy not sold) and on the customer's side (energy not available) for selecting which load will be shed. Given a target load relief, the magnitude of the load reduction signal to be sent to customers participating in the DILS program is found with the help of a Gaussian approximation to the probability distribution of their interruptible load. It proposes incentives aimed at changing the power consumption behavior of some categories of end users. Intelligent power meters along with dependable signaling network are required at the user end to implement this DILS program successfully.

In the work [13] an optimization model is proposed to minimize the load cuts, limiting them to their importance and establishing different stages for them through the relaxation of the minimum limits of voltage and maximum limits of active power flows through the transformers. Weight factor of load has been proposed to define the importance of buses under load shedding program.

In the work [14] authors have proposed a hierarchical genetic algorithm, which deals with the integer, discrete and real number encoding, is adopted to minimize the amount of shed load and maximize the lowest swing frequency. The decision-maker can assign the expected amount of shed load and the lowest swing frequency through an interactive process.

In the work [15] authors have proposed a strategy to reduce the system peak by shutting down some load groups, what they called ILG (Interruptible Load Groups). Incentive rates for those ILG's consumers have been proposed. The objective function to attack this problem incorporates the summation of the interrupted load and the weighted function to reflect the value of the interrupted load. Load Balance, maximal interrupted time and minimum connected time have been considered as constraints.

It is evident that some of the reviewed works on load management focuses on auto load shedding requiring under frequency relay operation to switch off group of feeders. The other works focus on direct load control at consumers' premises which require special software, hardware and infrastructure facilities. Moreover, the techniques were developed with one of the objectives like preventing voltage collapse, maintaining system stability, minimizing customer interruption costs, price spikes, reducing system peak in the event of contingency in a system which is otherwise having no generation deficit.

For a system which has persistent generation deficits and which is unable to afford expensive infrastructure an easy-to-implement load shedding technique needs to be developed. Load shedding can be done by switching off the individual distribution feeders rather than entire bus or a group of feeders at a time so that small areas will be affected by load shedding. Besides this, feeders may have some priority depending on the consumer level or important events, which is not addressed yet. Furthermore, determination of under frequency relay settings is difficult and sometimes the relays may not be working or these relays are not provided at all for feeders at a certain voltage level e.g. 11 kV. So a scheme is required for manual switching on/off individual feeders.

## 1.3 Objective of the Present Research

The present research aims at developing an algorithm for switching on/off the 11 kV feeders over a given period in a system with persistent generation deficit in such a manner that will prevent the served demand exceeding the allocation so that the system frequency remains within the allowed band for most of the times a day.

## 1.4 Organization of the Thesis

Chapter 1 contains introduction, literature review, objectives of the study and organization of this thesis.

Chapter 2 contains discussions of mathematical formulation and working sequence of the proposed algorithm. A flowchart of the proposed algorithm has been given. An example has been discussed in this chapter also to clarify each steps of the algorithm.

In chapter 3 the proposed algorithm has been applied in five 33/11 kV substations of Dhaka Power Distribution Company (DPDC) Limited with real data. The outputs have been analyzed and compared with existing practices for load shedding in the substations.

Chapter 4 contains the concluding remarks along with recommendations for further research in this area.

The Appendices (A-E) contain program code, supporting data and sample results.

# Chapter 2: Algorithm Development

## 2.1 Introduction

Proposed load shedding schedule is prepared before the required period and will be used by the distribution substation according to their load allocation. It considers several customer aspects such as feeder switching off counts, feeder shedding not allowed for consecutive two intervals and feeder priority while searching the optimum combination of feeders for load shedding.

## 2.2 Mathematical Modeling

It is logical that load would be shed in an interval t if the corresponding allocation is less than the demand i.e. $A_t\ (1 + \Delta A) < D_t$

where, $$D_t = \sum_{i=1}^{N} L_{i,t} \tag{2.1}$$

Load required to be shed at t-th hour

$$RLS_t = D_t - \{A_t \quad (1 \pm \Delta A)\} \tag{2.2}$$

Load shed amount that is actually possible

$$ALS_t = \sum_{i=1}^{N} \{L_{i,t} \quad (1 - U_{i,t})\} \tag{2.3}$$

Served load

$$SL_t = \sum_{i=1}^{N} (L_{i,t}\ U_{i,t}) \tag{2.4}$$

where,

$RLS_t$ = Required load shed amount at t-th hour

$ALS_t$ = Possible load shed amount at t-th hour

$SL_t$ = Served load at t-th hour

$A_t$ = Allocation of power for distribution at t-th hour.

$L_{i,t}$ = Demand of i-th feeder at t-th hour.

$U_{i,t}$ =0 means i-th feeder is switched off at t-th hour

=1 means i-th feeder is on at t-th hour

where, i = 1,2,….., N and t=1,2,….T.

$\Delta A$ = Tolerance allowed in load shed amount i.e. by this amount served load can differ from allocation.

N = Number of feeders

T = Number of time slots

Now required load shed amount is known for every hour from equation (2.2) and actual load shed amount is determined by equation (2.3). Feeders have to be switched off in such a fashion that load shed amount found in equation (2.3) is nearest to the amount found in equation (2.2). Therefore, objective function is as below.

Objective function

$$= \{(\sum_{i=1}^{N} L_{i,t}) - A_t \ (1 \pm \Delta A)\} - \sum_{i=1}^{N} \{L_{i,t} \ (1 - U_{i,t})\} \quad (2.5)$$

Objective function has to be minimized through combinatorial search with the following constraints

$$\left.\begin{array}{ll} \text{i.} & U_{i,t} \neq 0 \text{ if } E_{i,t} = 1, \\ \text{ii.} & U_{i,t} \neq 0 \text{ if } M_{i,t} = 1, \\ \text{iii.} & U_{i,t} \neq 0 \text{ if } U_{i,t-1} = 0 \text{ or } U_{i,t+1} = 0. \\ \text{iv.} & U_{i,t} \neq 0 \text{ if } \sum_{i \in C_1} P_{i,t} > \sum_{j \in C_2} P_{j,t} \end{array}\right\} \quad (2.6)$$

where, $E_{i,t}$ = emergency status (0 or 1) of i-th feeder at t-th time period

$M_{i,t}$ = must-on status (0 or 1) of i-th feeder at t-th time period

$P_{i,t}$= priority of i-th feeder in t-th time interval

$P_{j,t}$= priority of j-th feeder in t-th time interval

$C_1$ = one feasible combination

$C_2$ = any other feasible combination

Objective function is minimized for every hour starting from the first slot or any other slots. This way there will be T sets of combinations out of which the optimum combination is searched depending on following criteria. Each set differs from another due to the difference in selecting the starting slot for searching.

### 2.2.1 Served-load Exceeds Allocation Condition

The "Served-load Exceeds Allocation (SEA)" condition is determined by calculating the difference between actually supplied load and allocation in each hour. SEAMax is the maximum SEA in a day and SEACount is the count of SEA in a day. The best result should have minimum SEAMax and minimum SEACount. SEA of different hours of k-th combination, SEAMax of k-th combination and SEACount of k-th combination can be calculated by using following set of equations.

$$
\begin{aligned}
&U_{i,t} = UR_{i,t,k} \\
&SEA_{t,k} = [\{\sum_{i=1}^{N} (U_{i,t}\, L_{i,t})\} - A_t]\, 100 /\ A_t \\
&SEAMax_k = Max(SEA_{t,k}) \quad where,\ t = 1,2,3,......T, k = 1,2,3.....T \\
&SEACount_k = Count(SEA_{t,k})\ \ where,\ t = 1,2,3...T\ \ and\ SEA_{t,k} > \Delta A
\end{aligned}
\tag{2.7}
$$

where,

$U_{i,t}$ = on/off status of i-th feeder at t-th time slot

$UR_{i,t,k}$= on/off status of i-th feeder at t-th time slot of k-th combination

$SEA_{t,k}$ = percent by which served-load exceeds allocation (SEA) at t-th hour of k-th combination

$SEAMax_k$ = maximum SEA of k-th combination

SEACountk = count of time slots during which served-load exceeds the allocation

### 2.2.2 Energy Not Served (ENS) Condition

Energy Not Served (ENS) is total energy not served during a day. It can be found by calculating total megawatt-hour of shed loads in a whole day. ENS of k-th combination is calculated by using following set of equations,

$$U_{i,t} = UR_{i,t,k}$$
$$ENS_k = \sum_{t=1}^{T} \sum_{i=t}^{N} \{(1-U_{i,t})\ L_{i,t}\ (\frac{24}{T})\} \tag{2.8}$$

Where, $ENS_k$ = the ENS of k-th combination

$L_{i,t}$ = load of i-th feeder at t-th hour

i=1,2,3…N

t=1,2,3….T

k=1,2,3,….T

## 2.3 Description of the Algorithm

An algorithm has been developed to find the optimum combination of feeders to be shed. Expected output, required input data and the process have been discussed in the subsequent sections.

### 2.3.1 Input Data

N : Number of feeders.

T : Number of timeslots.

Hourly feeder wise demand: L is an N X T matrix. It stores hourly recent demand for each feeder. $L_{i,t}$ denotes demand of i-th feeder at t-th hour.

Hourly allocation : A is a 1 X T matrix. It stores hourly power allocation for the substation. $A_t$ means allocated distributable power for this substation at t-th hour.

Must-on status : M is an N X 1 matrix. It shows whether a feeder must be kept on feeder. If $M_i$ = 1 then i-th feeder cannot be shut down in any hour of the day.

Emergency status: E is an N X T matrix. It shows whether a feeder is emergency feeder in a particular hour. If $E_{i,t}$ = 1 then the i-th feeder cannot be turned off in t-th hour.

Feeder priority : P is an N X T matrix. $P_{i,t}$ shows priority of the i-th feeder in t-th hour.

### 2.3.2 Expected Output

UR : An N X T X T matrix that archives T number of different feasible load shedding combinations which differ from one another in the 'ON' or 'OFF' status assumed for the feeders in the beginning slot. Out of these combinations the optimum one, U is determined.

U : An N X T matrix. It stores load shedding pattern of a whole day for all feeders. If $U_{i,t}$ is zero, then i-th feeder will be shedded at t-th hour.

Where i=1,2,3,…….N and t=1,2,3……T

## 2.3.3 Process Flow

Step 1: All input data are stored in respective matrices and all variables are initialized.

Step 2: Starting Slot, k = 1

Flow Chart

Step 3: U = ones (N,T); U is initialized as a vector having N rows and T columns each containing 1.

Step 4: t=k

tPrev=24

tNext=2

Step 5: Calculate demand by using following equation.

$$D_t = \sum_{i=1}^{N} L_{i,t}$$

If $D_t$ is less than $A_t$ then no load shedding is required. Go to step 12. Otherwise go to next step (Step 6).

Step 6: Check all feeders in t-th hour whether they are candidate for load shedding. This checking is done on the following basis:

- if $U_{i,tPrev}$ is equal to 0 then i-th feeder cannot be turned off in t-th hour,
- if $U_{i,tNext}$ is equal to 0 then i-th feeder cannot be turned off in t-th hour,
- if $M_i$ is equal to 1 then i-th feeder cannot be turned off in t-th hour,
- if $E_{i,t}$ is equal to 1 then i-th feeder cannot be turned off in t-th hour.

  where, i =1,2,3….N

Step 7: Feeders, which are candidate for load shedding in t-th hour is stored in matrix called LoadSheddingCandidates.

Step 8: Required load shed amount = $(D_t – A_t)$

Required load shed amount with tolerance = $(D_t – A_t) \times (1 \pm \Delta A)$

If possible load shed amount found in Step 7 is greater than required load shed amount then go to next step or go to Step 12.

Step 9: All combinations of feeders, stored in LoadSheddingCandidates, are checked whether it meets required load shed amount with tolerance in t-th hour as found in Step 8. Possible number of combination

$$NC = {}^{m}C_1 + {}^{m}C_2 + {}^{m}C_3 + \dots + {}^{m}C_m$$

where, m = number of load shedding candidates in t-th hour found in step 7.

Step 10: The combination, which gives load shed amount closest to required load shed amount with tolerance found in Step 8, is searched. This is the optimum combination in t-th hour.

Step11: $U_{i,t}=0$ where i belongs to feeder numbers of the optimum combination found in step 10.

Step12: t = t + 1

tPrev = t – 1

tNext = t + 1

if tPrev < 1 then tPrev = tPrev + T

if tNext > T then tNext = tNext - T

Step 13: If t <= T then go to Step 5 else go to next step.

Step 14: A combination of load shedding for whole day is found. Store this load shedding combination for whole day in UR, which is a matrix that stores T number of optimum load shedding combinations.

$$UR_{i,t,k} = U_{i,t} \text{ for all values of i and t.}$$

Step 15: Increase the starting slot number by 1.

Starting Slot, k = k + 1
If k <= T go to Step 3 else go to next step.

Step 16: All possible load shedding combinations for whole day is found. Now calculate SEA, SEAMax and SEACount using equation 2.7.

Step 17: Calculate Energy Not Served, which is abbreviated as ENS, for each combination of UR by using equation 2.8.

Step 18: Identify the combination that has minimum SEAMax from the UR. If number of such combinations is equal to 1 then go to Step 20 else go to next step.

Step 19: Identify the combination that has minimum SEACount from the list of combinations found in Step 17. If number of such combinations is equal to 1 then go to Step 20 else go to next step.

Step 20: Identify the combination that has minimum ENS from the list of combinations found in Step 18. If number of such combinations is equal to 1 then go to Step 21 else select any of the combinations.

Step 21: Display the combination as the optimum combination

## 2.4 Example Run

A test substation has been considered with 5 feeders and the algorithm has been run considering 4 hours or slots. All iteration has been shown in Appendix A.

## 2.5 Coding the Algorithm

Matlab has been used to code the algorithm. The main function is written in the file FeederScheduler, which calls two other sub-routines written in SheddingConfig and Write_Data_For_Graph (Appendix B). Input data has to be entered into an excel file from which FeederScheduler reads when necessary. Output data is written in a text file in comma separated value (csv) format. It may be transformed into excel sheets for analyzing the result.

# Chapter 3: Results and Discussion

## 3.1 Introduction

Proposed algorithm has been applied on 5 numbers of real life substations to determine the load shedding schedule. The substations belong to Dhaka Power Distribution Company (DPDC) Limited. In order to get the context of load shedding specific to the DPDC substations, the scenario of power sector in Bangladesh is also presented before illustrating the application of the proposed scheme. In the limited space the results have mainly been presented in the form of general comments together with representative data and plots.

## 3.2 Power System in Bangladesh

Bangladesh Power Development Board (BPDB) is responsible for generating and purchasing power in this Bangladesh. Power is generated both in public and private sectors. Power Grid Company of Bangladesh (PGCB) is the only public entity responsible for power transmission from generation ends to the distribution agencies. There are five entities responsible for power distribution viz. Dhaka Power Distribution Company (DPDC) Ltd., Rural Electrification Board (REB), Bangladesh Power Development Board (BPDB), Dhaka Electricity Supply Company (DESCO) Ltd. and West Zone Power Distribution Company (WZPDC) Ltd. PGCB decides which zone (under the distribution agencies) will get how much power depending upon available generation in different periods of a day. This decision usually comes a few hours ahead in the day and evening peak period and sometimes revised in an emergency situation. Then the concerned distribution entity or a joint body comprising members from different distribution agencies divide the allocated amount among the substations in the zone.

### 3.2.1 Power Generation vs. Demand

Total Installed capacity of power generation is approximately 5,800 MW as of October 2009. Maximum generation recorded in the year of 2010 is 4,699 MW on 20th August, 2010 against the seasonal maximum demand of about 5700 MW.

In Bangladesh demand varies depending on the season. For example total system demand in January, February, March and April of 2010 are respectively 4,696 MW, 4,935 MW, 5,439 MW and 5,783 MW. Therefore, it is obvious that demand is less in winter season and more in summer season. But demand is always greater than generation in either case requiring load management. The gap between generation and demand is mainly due to inadequate supply of gas and ageing of the major generation units.

### 3.2.2 Present Load Management Scheme

In Bangladesh load shedding by tripping feeders in a substation is the only option for load management. The following steps are used for this normally,

**Step 1:** PGCB monitors the total available generation every interval. It uses some predefined ratio to allocate power for different zones. Everyday just before peak hours PGCB informs distribution zones how much power they can distribute in the peak period. In case of severe deficit of power generation at other periods PGCB informs at a short notice every zone about its allocated share.

Suppose PGCB allocates 1300 MW for Dhaka zone at 6:30 PM in a certain day.

**Step 2:** DPDC is aware of the allocation for Dhaka zone i.e. 1300 MW. This 1300 MW is then distributed in the following manner:

| | | |
|---|---|---|
| Important/Key Point Installation (KPI) Area | | =100MW |
| DPDC | 1200 X .51 | =612MW |
| DESCO | 1200 X .285 | =342MW |

| | | |
|---|---|---|
| REB | 1200 X .195 | =342MW |
| | | ----------- |
| Total | | 1300MW |

100MW (for important areas) allocation is further shared between DPDC and DESCO as 70MW for DESA and 30MW for DESCO.

This kind of sharing is agreed upon by the concerned distribution agencies based on the previous load data. DPDC has developed a Table C.1 (Appendix C), which is used to distribute allocation among the substations. This Table shows fixed allocation for every substation under DPDC/DESCO/REB for three typical allocations 1200, 1300 and 1400 MW respectively. So they don't have to recalculate the substations' share whenever they get allocation from the PGCB.

So according to the Table C.1, for a total allocation of 1300 MW in Dhaka zone Dhanmondi substation will avail 21.10 MW during day peak and 23 MW during evening peak. DPDC informs the controlling division of the concerned substation about their allocation.

**Step 3:** There are Divisional Control Offices each of which commands a few substations under it. After they are informed of the allocation for their concerned substations, a duty officer in the Divisional Control Room checks Table D.3 (Appendix D), which shows prefixed status (i.e. on/off) of the feeder corresponding to different allocation at different hours and instructs over phone the operators in the substations to switch on/off the feeders according to the Table D.1. However, the feeders serving hospitals are usually kept outside load shedding plan.

For zones other than Dhaka, PGCB informs the allocation to their concerned grid circle offices which then implement this with the help of a "Zonal Committee" formed by representatives from various distribution agencies operating in that zone.

Currently DPDC is using the Tables C.1 and D.1 to exercise load shed. These Tables have been developed based on previous load data and the nature of the majority consumers such as hospitals, KPI, etc being served by the feeder. These are supposed to be updated depending upon seasons and events like World Cup, Ramadan etc. Sometimes Duty Officers in Division Control Room cannot stick to the Table D.1 because of emergency power requirements in some important areas. However the basis of selecting feeders for load shed according to the Table (Appendix D) is quite arbitrary without executing any algorithm for finding other potential combinations.

### 3.2.3 Further Actions for Load Shed

Though load shedding is implemented by distributions agencies PGCB has also a role in tripping feeders. PGCB has a National Load Dispatch Center (NLDC), which always monitors available generation as well as system frequency. If due to load served from substations the system frequency goes below tolerable range, NLDC commands the grid substations to turn off some feeders as needed. Sometimes substations can not follow the allocation and they utilize more power. Then NLDC may turn the substations off by shutting down the corresponding outgoing (i.e. 33 kV side) feeder of a Grid Substation. In some of the 33 kV feeders under frequency relays are installed. Depending upon their settings these under frequency relays shut down entire substations served by those feeders in case of frequency becoming less than or equal to the setting. So if PGCB takes action or under frequency relays operate, load shedding will occur in a large area.

## 3.3 Application of Proposed Algorithm in New Ramna 33/11 kV SS

Input data (hourly demand and allocation) for a typical summer day have been collected from the New Ramna 33/11kV distribution substation (Appendix E). It has three incoming 33 kV feeders and 22 out going feeders as shown in the single line diagram in Figure 3.1. Among the 22 outgoing feeders 8 are must-on feeders (viz Secreteriat East, T & T, Secreteriat West, Police Bhaban, Press Club, Ramna Local, Rail Bhaban, Transport Pool), which cannot be switched off because of their national importance. There is no priority data available for other feeders. Chronological load demand has been collected from the substation log book.

Daily chronological demand curve of a substation usually shows a double peak nature, one is day peak and other is evening peak. Typical demand and allocation pattern of New Ramna 33/11 kV substation (SS) is shown in Figure 3.2.

### 3.3.1 Finding the Optimum Combination

The proposed algorithm has been applied on the New Ramna substation by assuming emergency and priority status for the feeders other than the "Must-On" feeders. These emergency and priority status are as shown in Appendix E. It should be noted that in this work the priority status of the feeders are specified as real numbers equal to the respective demands.

The program for proposed algorithm has been run considering a load shed tolerance (ΔA) of 1% and it generated 24 feasible combinations of feeders for load shedding at 1 hour interval among which the best one is selected depending on SEAMax, SEACount and ENS as computed by equation (2.7) and (2.8) respectively. While all the combination details have been shown in the Appendix E the best one (bold faced) has been compared in Table 3.1.

Figure 3.1: Diagram of the substations

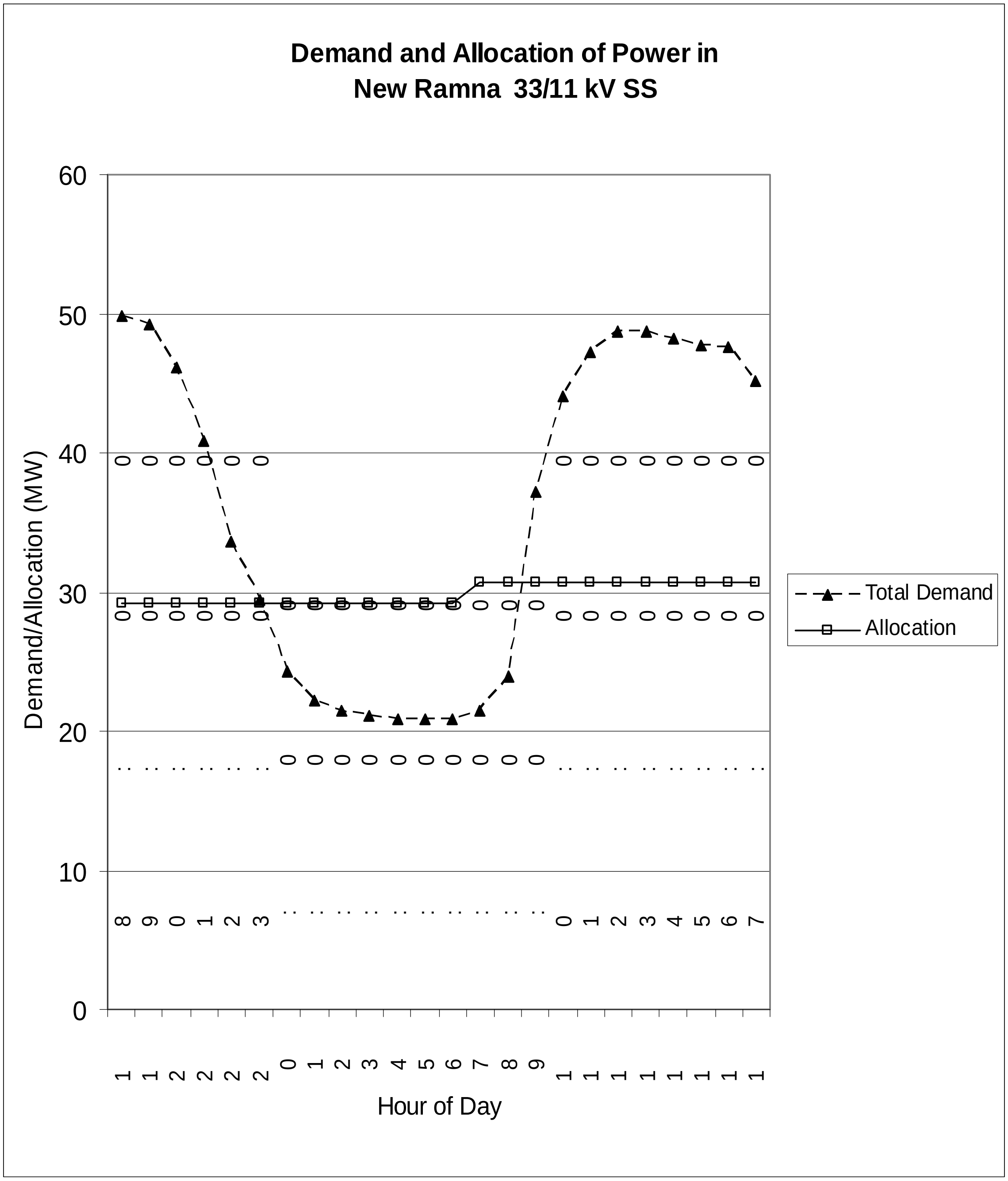


Figure 3.2: Chronological demand and allocation of power in New Ramna SS.

Table 3.1: SEAMax, SEACount and ENS of all combinations found after execution of the program for New Ramna SS

| Combination | SEAMax (%) | SEA Count | ENS (MWH) |
|---|---|---|---|
| 1 | 4.07 | 1 | 208.08 |
| 2 | 4.66 | 1 | 208.03 |
| **3** | **0.99** | **0** | **209.82** |
| 4 | 5.83 | 2 | 207.5 |
| 5 | 1.58 | 1 | 209.15 |
| 6 | 1.58 | 1 | 209.04 |
| 7 | 1.58 | 1 | 209.04 |
| 8 | 1.58 | 1 | 209.04 |
| 9 | 1.58 | 1 | 209.04 |
| 10 | 1.58 | 1 | 209.04 |
| 11 | 1.58 | 1 | 209.04 |
| 12 | 1.58 | 1 | 209.04 |
| 13 | 1.58 | 1 | 209.04 |
| 14 | 1.58 | 1 | 209.04 |
| 15 | 1.58 | 1 | 209.04 |
| 16 | 1.58 | 1 | 209.04 |
| 17 | 1.58 | 1 | 209.04 |
| 18 | 1.68 | 1 | 209.24 |
| 19 | 3.19 | 1 | 208.49 |
| 20 | 16.79 | 2 | 204.34 |
| 21 | 11.64 | 1 | 205.97 |
| 22 | 7.63 | 1 | 207.17 |
| 23 | 4.86 | 1 | 207.99 |
| 24 | 3.81 | 1 | 208.28 |

### 3.3.2 Analysis of Results

Figure 3.3 shows allocation and compares the "served-load" as determined by the proposed algorithm and existing practice of DPDC. It shows that the proposed algorithm makes the served-load stay within 1% of allocation as also shown in Figure 3.4. But in the existing practice it has been found that served load exceeds the allocation by 1.27% to 7.82% in 5 intervals, which may cause under frequency in the system if other substations' served-load also exceed allocation similarly.

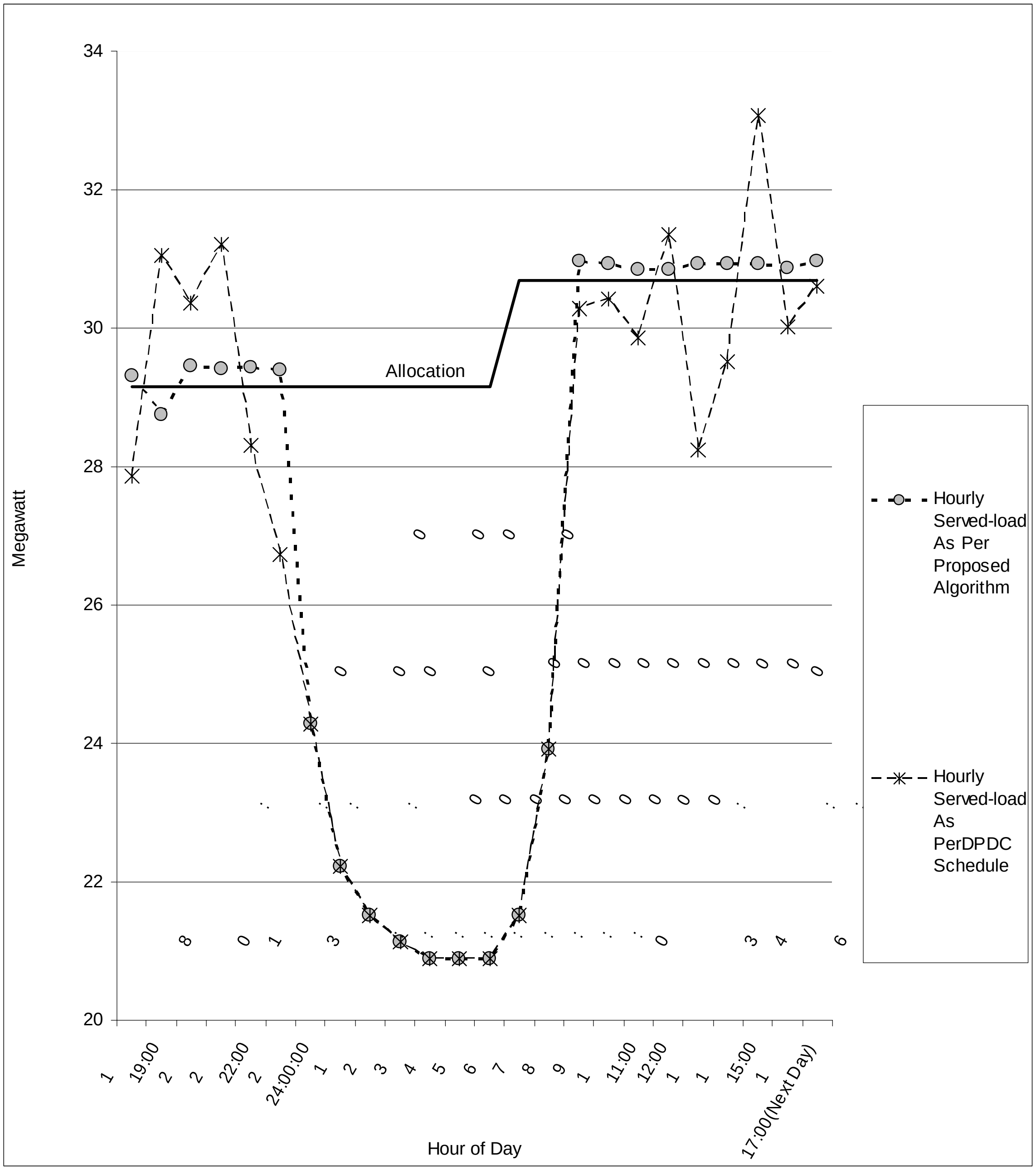


Figure 3.3: Hourly allocation vs. served load as per proposed and existing practice in New Ramna SS.

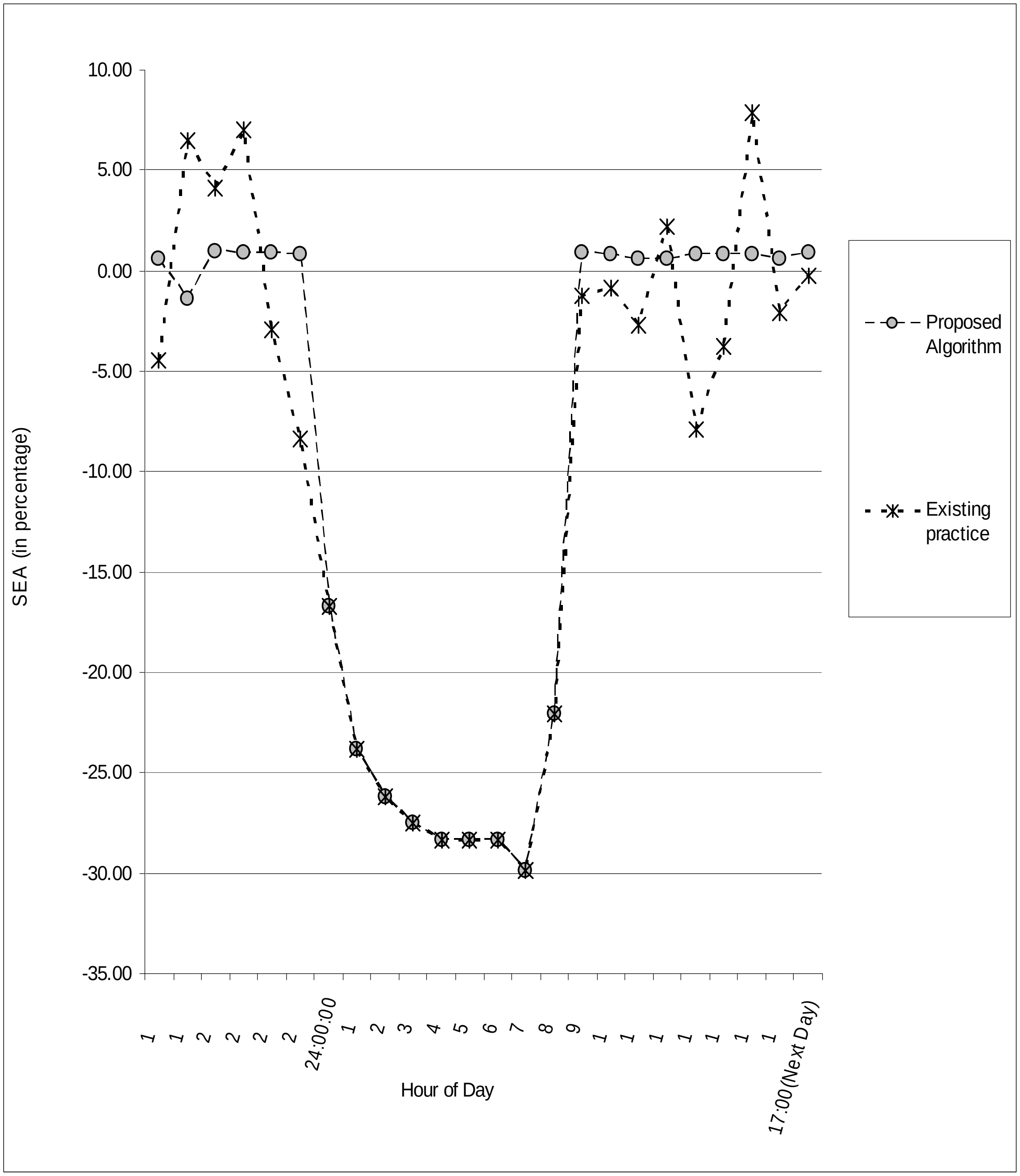


Figure 3.4: SEA in percentage by the proposed algorithm and existing practice in New Ramna substation

## 3.4 Application of Proposed Algorithm in Banglabazar 33/11 kV SS

Input data (hourly demand and allocation) for a typical summer day have been collected from Banglabazar 33/11 kV Substation. It has 12 outgoing feeders. Among the 12 outgoing feeders one is must-on feeder (viz Sir Solimullah Medical College and Hospital), which cannot be switched off because of its national importance. There is no priority data available for other feeders. Chronological load demand has been collected from the substation log book. Daily chronological demand curve of this substation usually shows a double peak nature, one is day peak and other is evening peak. Typical demand and allocation pattern of Banglabazar 33/11 kV substation (SS) is shown in Figure 3.5.

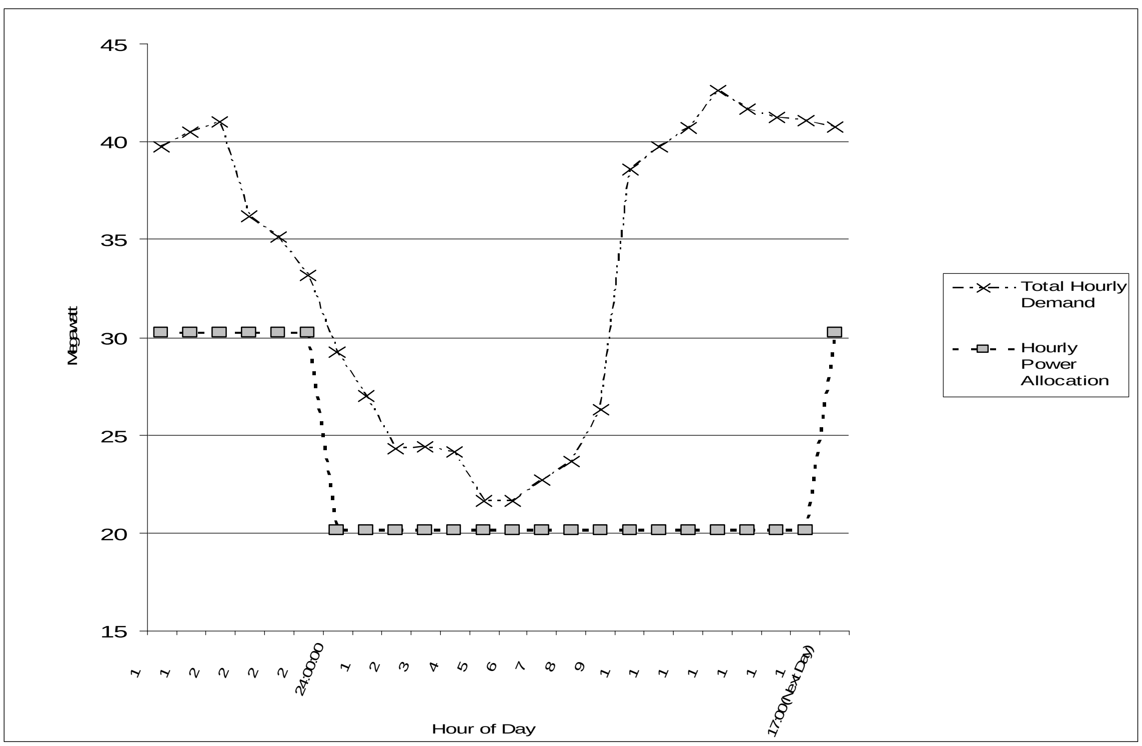


Figure 3.5: Chronological demand and allocation of power in New Banglabazar SS.

### 3.4.1 Finding the Optimum Combination

The proposed algorithm has been applied on the Banglabazar substation by assuming emergency and priority status for the feeders other than the "Must-On" feeders. The program for proposed algorithm has been run considering a load shed tolerance (ΔA) of 1% and it generated 24 feasible combinations of feeders for load shedding at 1 hour interval among which the best one is selected depending on SEAMax, SEACount and ENS as computed using equation (2.7) and (2.8) respectively. The best one (bold faced) has been compared in Table 3.2.

Table 3.2: SEAMax, SEACount and ENS of all combinations found after execution of the program for Banglabazar SS

| Combination | SEAMax (%) | SEA Count | ENS (MWH) |
|---|---|---|---|
| 1 | 9.92 | 6 | 236.27 |
| 2 | 9.92 | 6 | 235.48 |
| 3 | 9.92 | 6 | 235.48 |
| 4 | 9.92 | 6 | 235.48 |
| 5 | 9.92 | 6 | 235.48 |
| 6 | 9.92 | 6 | 235.28 |
| 7 | 9.92 | 7 | 235.02 |
| 8 | 9.92 | 6 | 235.48 |
| 9 | 9.92 | 6 | 235.38 |
| 10 | 9.92 | 6 | 235.35 |
| 11 | 9.92 | 6 | 235.48 |
| 12 | 9.92 | 6 | 235.48 |
| 13 | 9.92 | 6 | 235.48 |
| 14 | 9.92 | 6 | 235.48 |
| 15 | 12.54 | 6 | 235.58 |
| **16** | **5.35** | **6** | **238.49** |
| 17 | 6.89 | 7 | 238.28 |
| 18 | 25.73 | 5 | 231.9 |
| 19 | 65.25 | 4 | 224.1 |
| 20 | 65.1 | 5 | 223.06 |
| 21 | 71.34 | 5 | 223.5 |
| 22 | 48.69 | 6 | 228.1 |
| 23 | 44.32 | 6 | 228.23 |
| 24 | 40.36 | 6 | 228.19 |

### 3.4.2 Analysis of Results

Figure 3.6 shows allocation and demand and compares the "served-load" as determined by the proposed algorithm and existing practice of DPDC. It shows that the proposed algorithm makes the served-load stay within 5.35% of allocation as also shown in Figure 3.7.

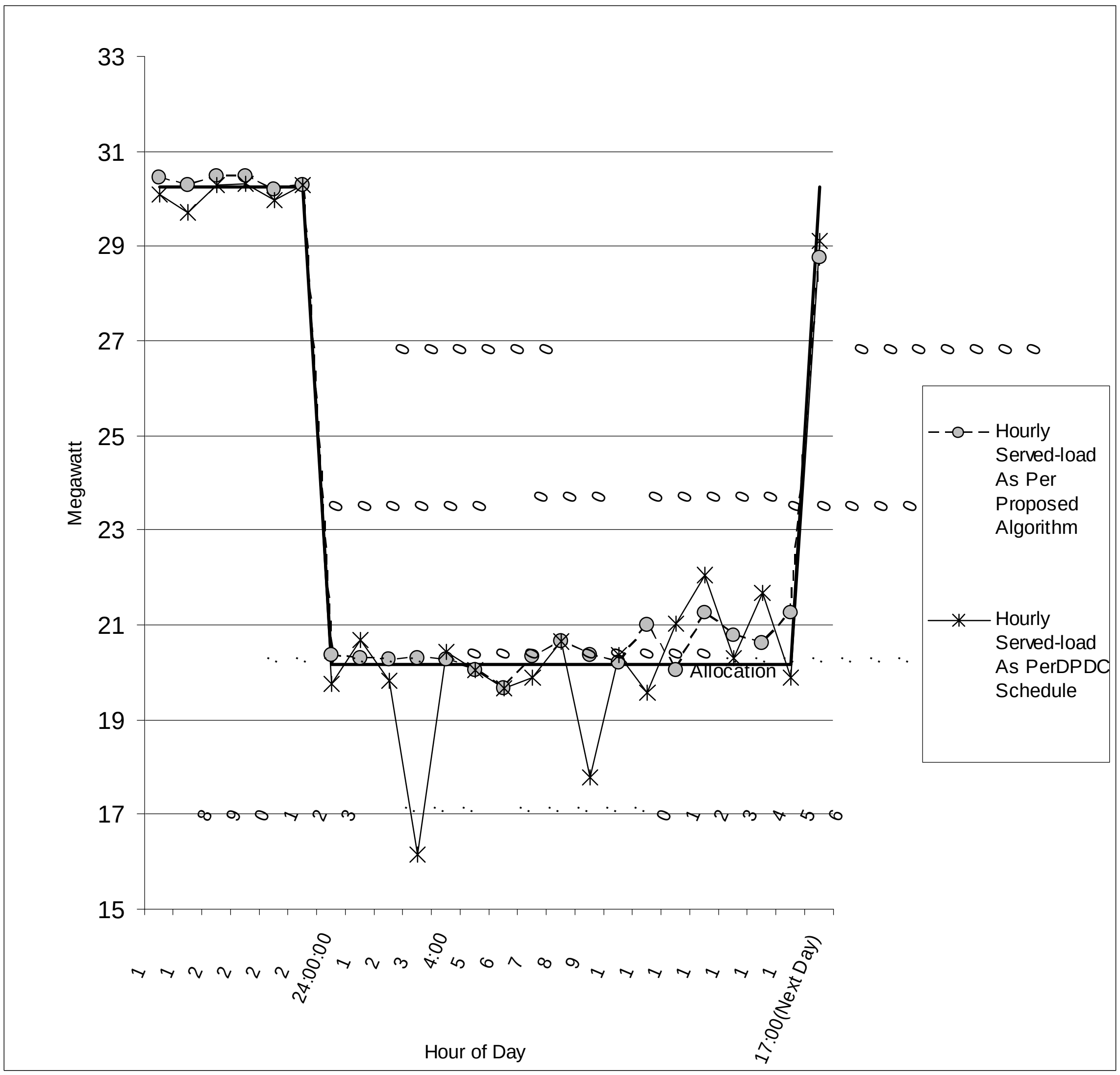


Figure 3.6: Hourly allocation vs. served load as per proposed and existing practice in Banglabazar SS.

But in the existing practice it has been found that served load exceeds the allocation by 1.34% to 9.37% in 6 intervals, which may cause under frequency in the system if other substations' served-load also exceed allocation similarly.

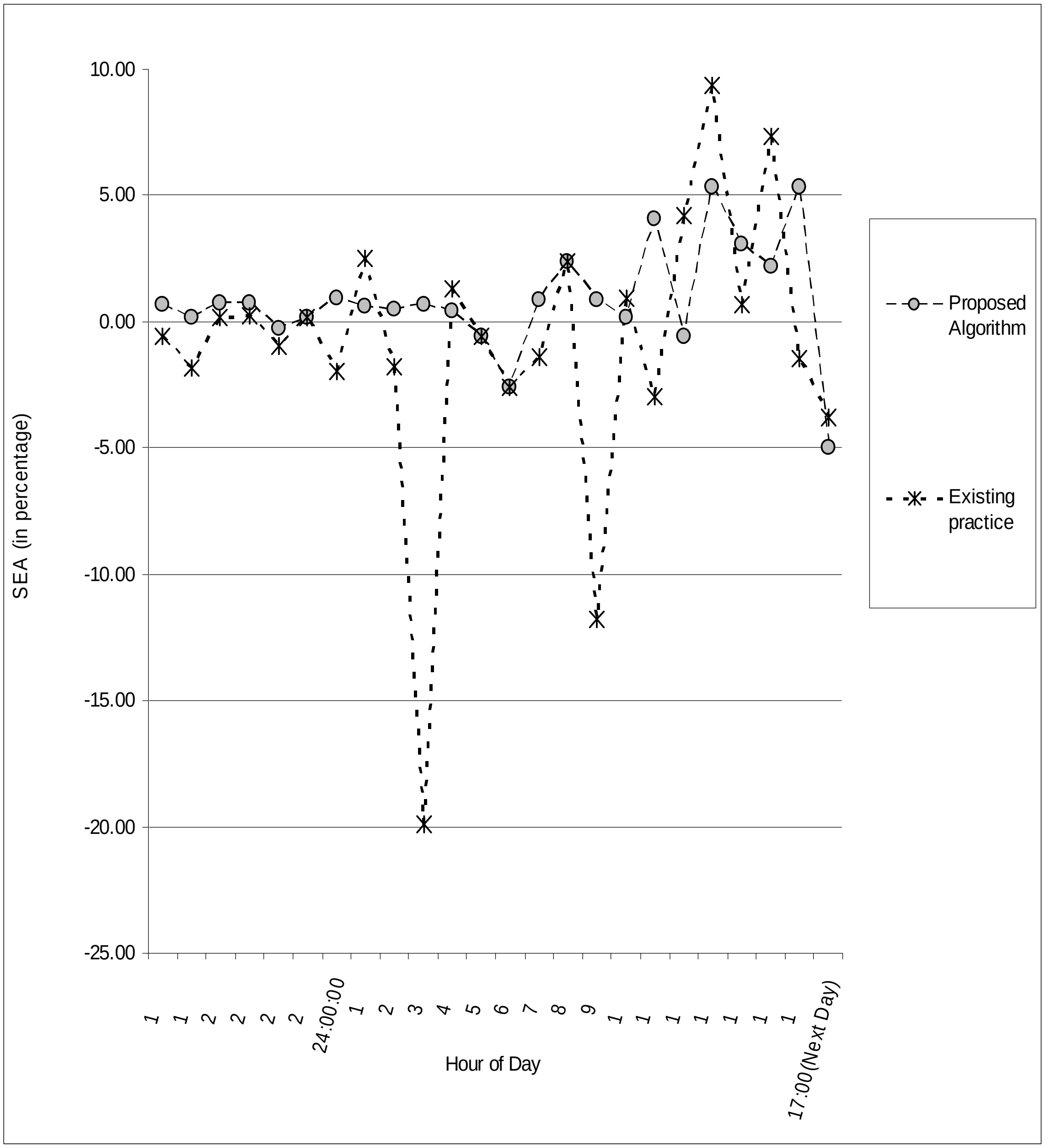


Figure 3.7: SEA in percentage by the proposed algorithm and existing practice in Banglabazar SS.

## 3.5 Application of Proposed Algorithm in Kamrangir Char 33/11 kV SS

Input data (hourly demand and allocation) for a typical summer day have been collected from Kamrangir Char 33/11 kV Substation. It has 8 outgoing feeders. There is no must-on feeder in this substation. There is no priority data available for feeders also. Chronological load demand has been collected from the substation log book. Demand and allocation pattern of this substation is shown in Figure 3.8.

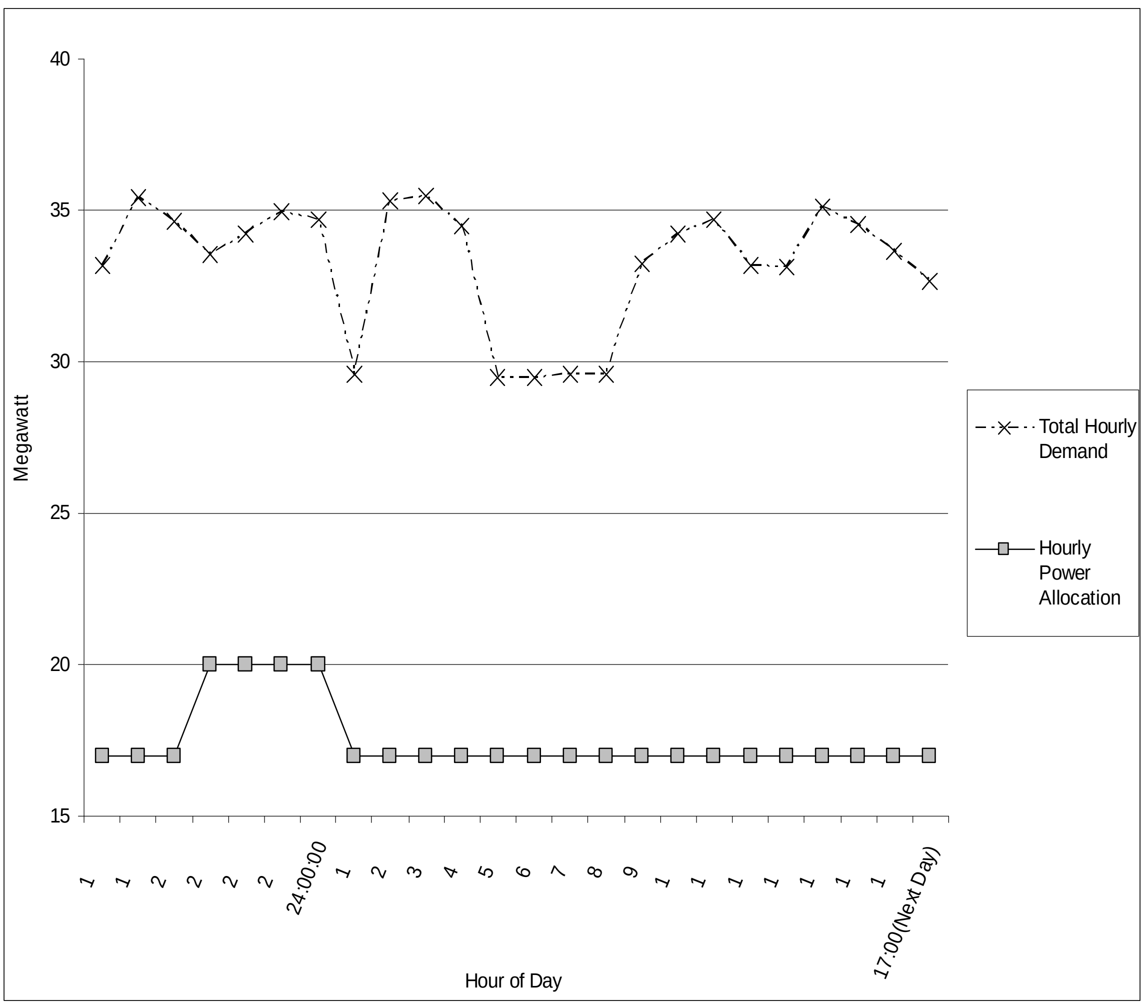


Figure 3.8: Chronological demand and allocation of power in Kamrangir Char

### 3.5.1 Finding the Optimum Combination

The proposed algorithm has been applied on the Kamrangir Char substation by assuming emergency and priority status for the feeders. The program for proposed algorithm has been run considering a load shed tolerance (ΔA) of 1% and it generated 24 feasible combinations of feeders for load shedding at 1 hour interval among which the best one is selected depending on SEAMax, SEACount and ENS as computed using equation (2.7) and (2.8) respectively. The best one (bold faced) has been compared in Table 3.3.

Table 3.3: SEAMax, SEACount and ENS of all combinations found after execution of the program Kamrangir Char SS

| Combination | SEAMax (%) | SEA Count | ENS (MWH) |
|---|---|---|---|
| 1 | 21.76 | 9 | 367.27 |
| 2 | 57.82 | 9 | 363.19 |
| 3 | 41.76 | 8 | 369.75 |
| 4 | 38.35 | 14 | 363.47 |
| 5 | 42.60 | 9 | 366.74 |
| 6 | 9.53 | 10 | 371.03 |
| 7 | 25.80 | 9 | 371.59 |
| 8 | 24.60 | 8 | 370.64 |
| 9 | 31.94 | 14 | 362.65 |
| 10 | 61.82 | 11 | 361.90 |
| 11 | 77.59 | 9 | 363.41 |
| 12 | 42.41 | 10 | 364.63 |
| 13 | 27.65 | 12 | 366.63 |
| 14 | 21.24 | 12 | 367.73 |
| 15 | 7.88 | 11 | 371.06 |
| **16** | **6.53** | **6** | **377.52** |
| 17 | 29.88 | 14 | 362.39 |
| 18 | 49.35 | 9 | 365.72 |
| 19 | 34.00 | 10 | 364.94 |
| 20 | 32.65 | 16 | 362.71 |
| 21 | 21.29 | 10 | 370.07 |
| 22 | 95.18 | 7 | 359.76 |
| 23 | 43.88 | 14 | 363.02 |
| 24 | 40.00 | 9 | 368.43 |

## 3.5.2 Analysis of Results

Figure 3.9 shows allocation and demand and compares the “served-load” as determined by the proposed algorithm and existing practice of DPDC. It shows that the proposed algorithm makes the served-load stay within 6.53% of allocation as also shown in Figure 3.10.

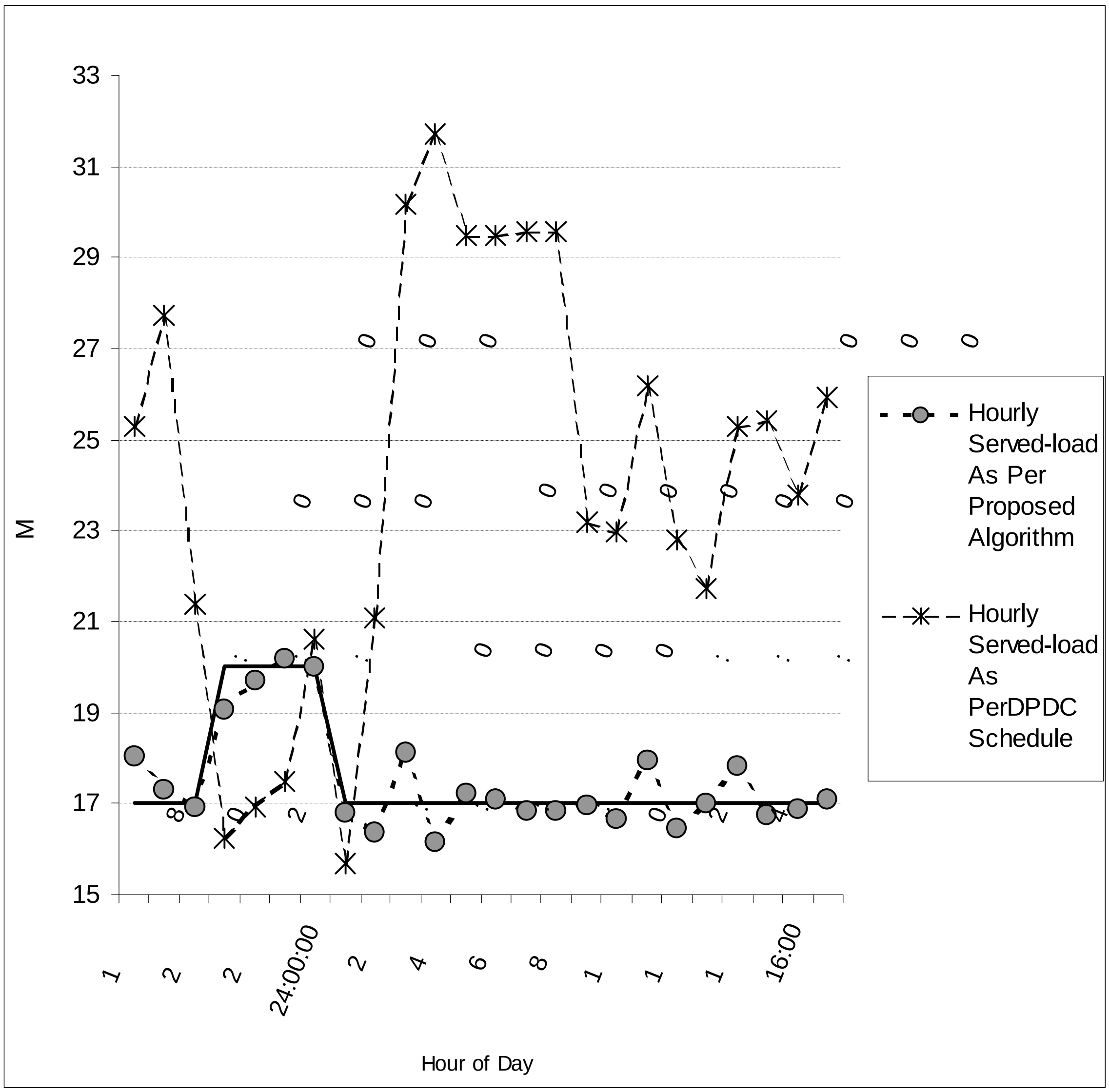


Figure 3.9: Hourly allocation vs. served load as per proposed and existing practice in Kamrangir Char SS.

But in the existing practice it has been found that served load exceeds the allocation by 3.15% to 86.59% in 20 intervals, which may cause under frequency in the system if other substations' served-load also exceeds allocation similarly.

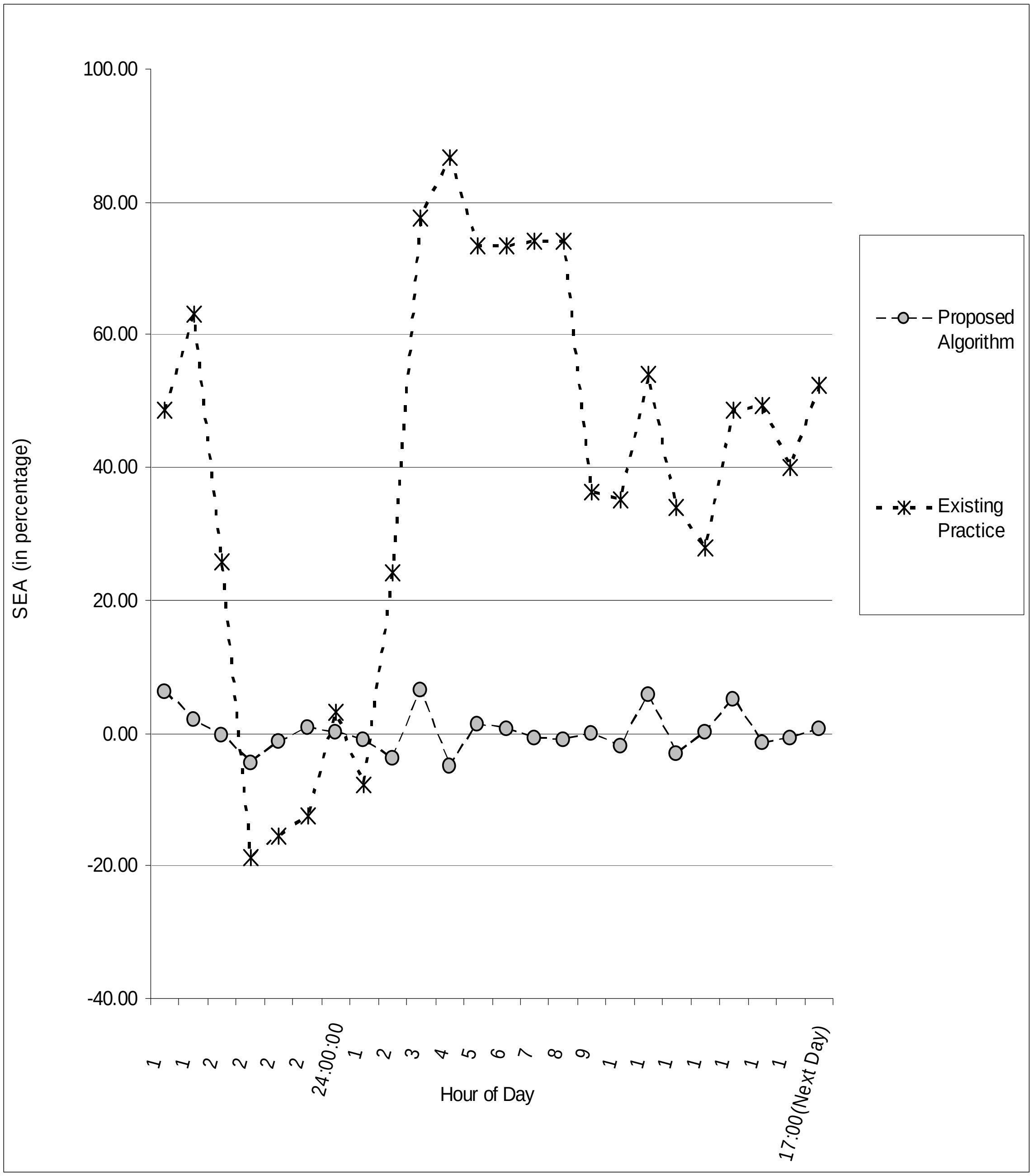


Figure 3.10: SEA in percentage by the proposed algorithm and existing practice in Kamrangir Char SS.

## 3.6 Application of Proposed Algorithm in Lalmatia 33/11 kV SS

Input data (hourly demand and allocation) for a typical summer day have been collected from Lalmatia 33/11 kV Substation. It has 14 outgoing feeders. There is no must-on feeder in this substation. There is no priority data available for feeders also. Chronological load demand has been collected from the substation log book. Demand and allocation pattern of this substation is shown in Figure 3.11.

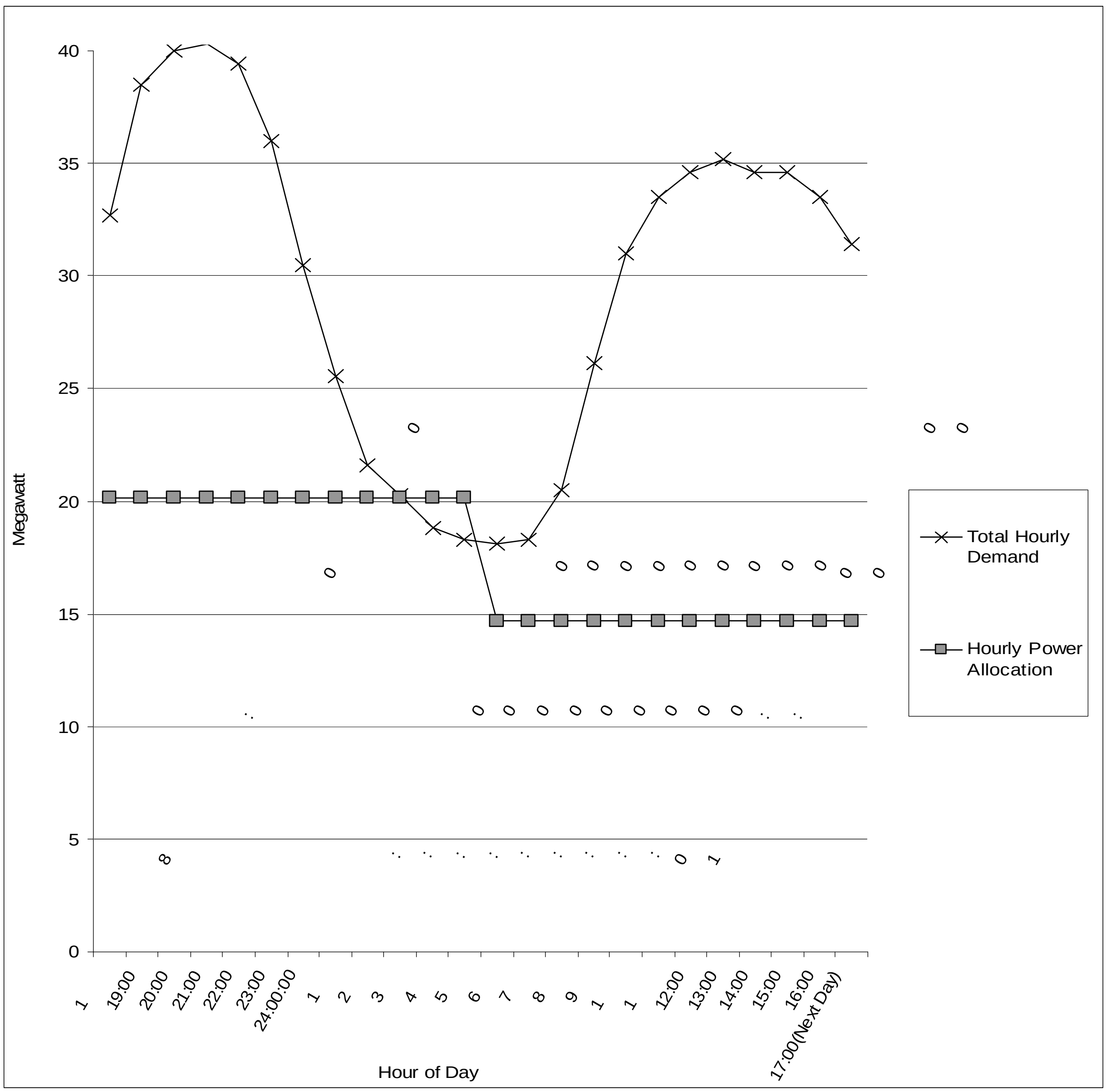


Figure 3.11: Chronological demand and allocation of power in Lalmatia SS

### 3.6.1 Finding the Optimum Combination

The proposed algorithm has been applied on the Lalmatia substation by assuming emergency and priority status for the feeders. The program for proposed algorithm has been run considering a load shed tolerance (ΔA) of 1% and it generated 24 feasible combinations of feeders for load shedding at 1 hour interval among which the best one is selected depending on SEAMax, SEACount and ENS as computed using equation (2.7) and (2.8) respectively. The best one (bold faced) has been compared in Table 3.4.

Table 3.4: SEAMax, SEACount and ENS of all combinations found after execution of the program for Lalmatia SS

| Combination | SEAMax (%) | SEA Count | ENS (MWH) |
|---|---|---|---|
| 1 | 75.19 | 7 | 274.25 |
| 2 | 30.2 | 10 | 276.65 |
| 3 | 30.2 | 10 | 274.65 |
| 4 | 33.86 | 9 | 273.25 |
| 5 | 55.18 | 9 | 269.25 |
| 6 | 45.76 | 9 | 270.65 |
| 7 | 30.2 | 10 | 276.65 |
| 8 | 30.2 | 9 | 279.65 |
| 9 | 30.2 | 9 | 279.85 |
| 10 | 30.2 | 9 | 279.65 |
| 11 | 30.2 | 9 | 279.65 |
| 12 | 30.2 | 9 | 279.65 |
| 13 | 30.2 | 9 | 279.65 |
| 14 | 30.2 | 9 | 279.65 |
| 15 | 30.2 | 9 | 279.65 |
| **16** | **21.34** | **11** | **277.8** |
| 17 | 28.15 | 11 | 278.1 |
| 18 | 34.97 | 8 | 278.75 |
| 19 | 114.72 | 8 | 266.5 |
| 20 | 98.36 | 9 | 266.5 |
| 21 | 88.82 | 9 | 272.45 |
| 22 | 84.05 | 10 | 268.65 |
| 23 | 105.18 | 8 | 269.3 |
| 24 | 66.33 | 9 | 272.95 |

### 3.6.2 Analysis of Results

Figure 3.12 shows allocation and demand and compares the “served-load” as determined by the proposed algorithm and existing practice of DPDC. It shows that the proposed algorithm makes the served-load stay within 21.34% of allocation as also shown in Figure 3.13.

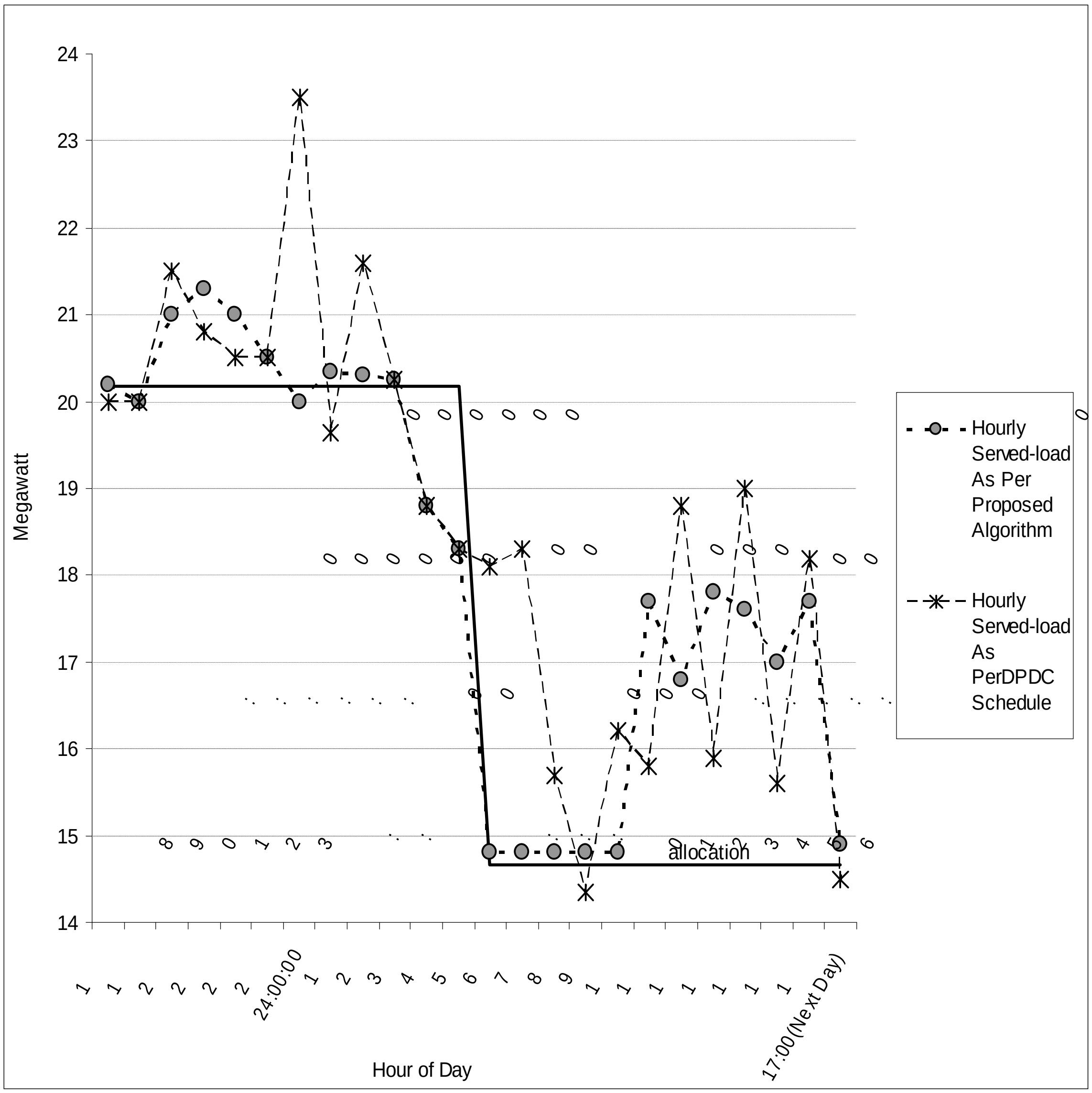


Figure 3.12: Hourly allocation vs. served load as per proposed and existing practice in Lalmatia SS.

But in the existing practice it has been found that served load exceeds the allocation by 1.6% to 29.52% in 16 intervals, which may cause under frequency in the system if other substations' served-load also exceeds allocation similarly.

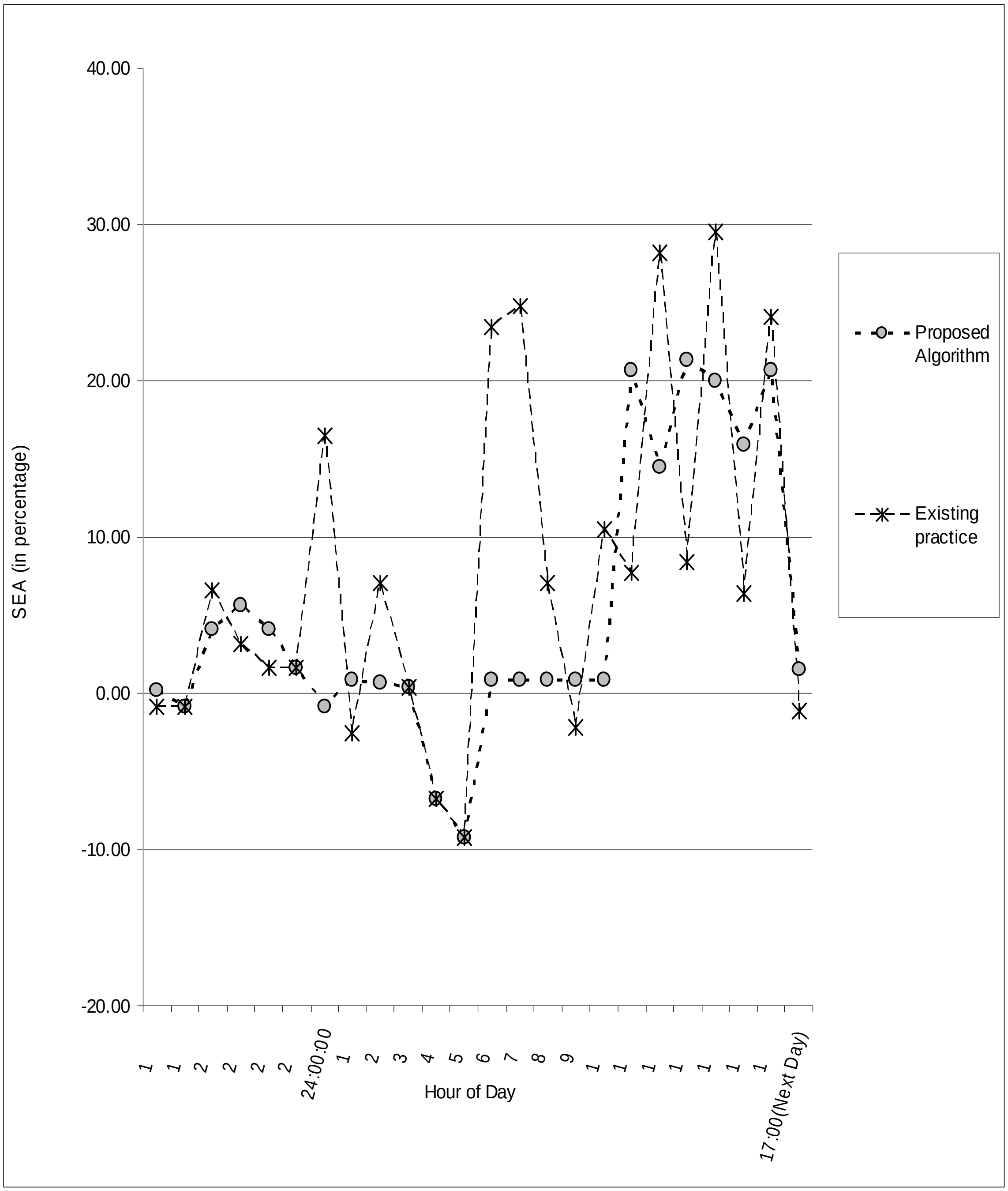


Figure 3.13: SEA in percentage by the proposed algorithm and existing practice in Lalmatia SS.

## 3.7 Application of Proposed Algorithm in Tejgaon 33/11 kV SS

Input data (hourly demand and allocation) for a typical summer day have been collected from the Tejgaon 33/11kV distribution substation. It has 10 out going feeders. Among the 10 outgoing feeders one is must-on feeder (ICC of PMO), which cannot be switched off because of their national importance. There is no priority data available for other feeders. Chronological load demand has been collected from the substation log book. Demand and allocation pattern of this substation is shown in Figure 3.14.

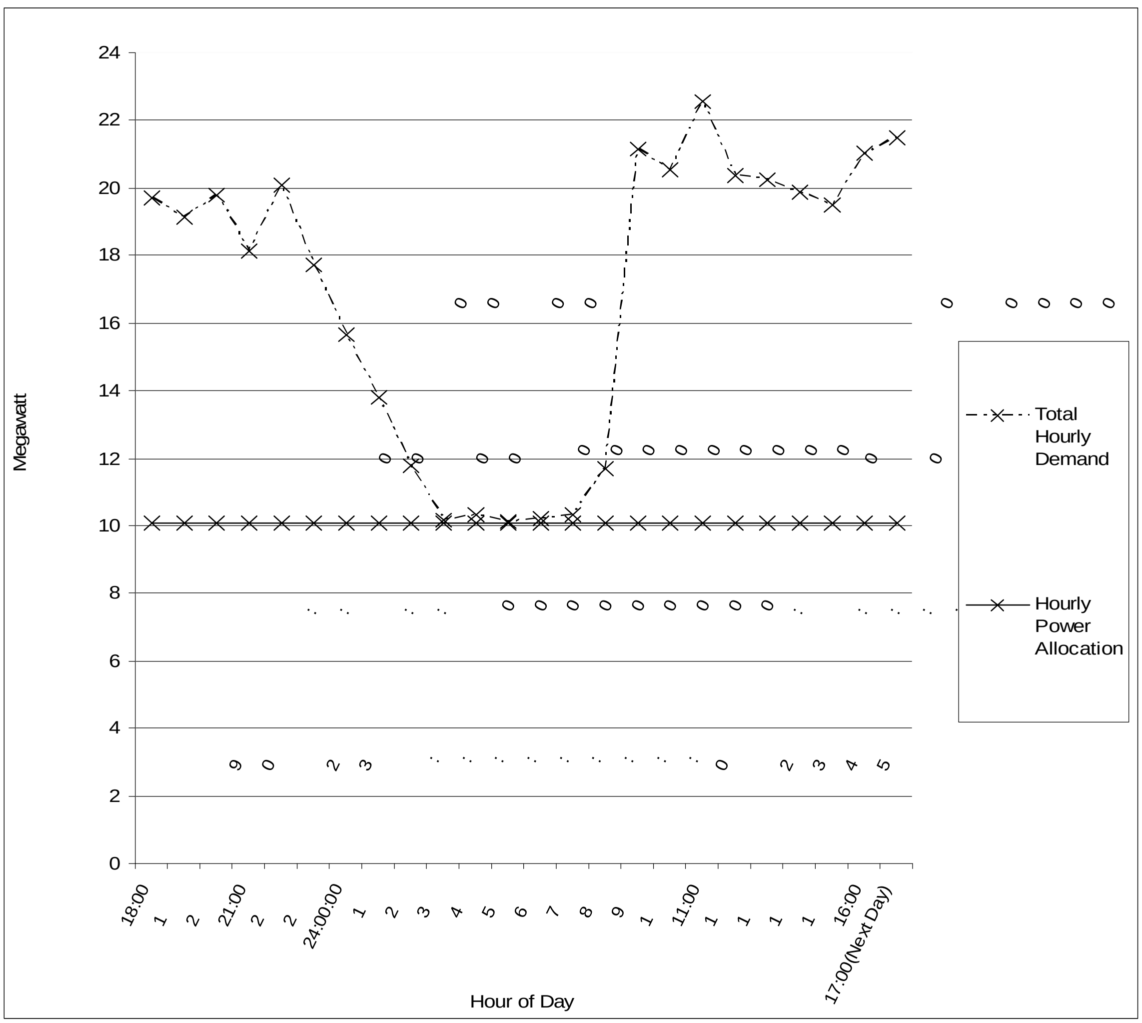


Figure 3.14: Chronological demand and allocation of power in Tejgaon SS.

### 3.7.1 Finding the Optimum Combination

The proposed algorithm has been applied on the Tejgaon substation by assuming emergency and priority status for the feeders other than the "Must-On" feeders. The program for proposed algorithm has been run considering a load shed tolerance (ΔA) of 1% and it generated 24 feasible combinations of feeders for load shedding at 1 hour interval among which the best one is selected depending on SEAMax, SEACount and ENS as computed using equation (2.7) and (2.8) respectively. The best one (bold faced) has been compared in Table 3.5.

Table 3.5: SEAMax, SEACount and ENS of all combinations found after execution of the program for Tejgaon SS

| **Combination** | **SEAMax (%)** | **SEA Count** | **ENS (MWH)** |
|---|---|---|---|
| 1 | 41.17 | 10 | 152.28 |
| 2 | 84.62 | 10 | 147.71 |
| 3 | 41.37 | 10 | 148.69 |
| 4 | 31.45 | 11 | 149.62 |
| 5 | 31.45 | 11 | 149.54 |
| 6 | 31.45 | 10 | 151.43 |
| 7 | 37.10 | 11 | 147.44 |
| 8 | 31.45 | 11 | 151.04 |
| 9 | 31.45 | 10 | 151.43 |
| 10 | 31.45 | 10 | 151.43 |
| 11 | 31.45 | 10 | 151.43 |
| 12 | 31.45 | 10 | 151.43 |
| 13 | 31.45 | 10 | 151.43 |
| 14 | 31.45 | 10 | 151.53 |
| 15 | 31.45 | 10 | 151.43 |
| **16** | **15.67** | **12** | **153.22** |
| 17 | 48.91 | 12 | 151.33 |
| 18 | 57.34 | 10 | 152.73 |
| 19 | 60.91 | 11 | 153.13 |
| 20 | 31.45 | 10 | 151.43 |
| 21 | 92.86 | 11 | 146.00 |
| 22 | 49.01 | 10 | 151.91 |
| 23 | 39.09 | 11 | 148.80 |
| 24 | 47.82 | 8 | 151.23 |

## 3.7.2 Analysis of Results

Figure 3.15 shows allocation and demand and compares the “served-load” as determined by the proposed algorithm and existing practice of DPDC. It shows that the proposed algorithm makes the served-load stay within 15.67% of allocation as also shown in Figure 3.16.

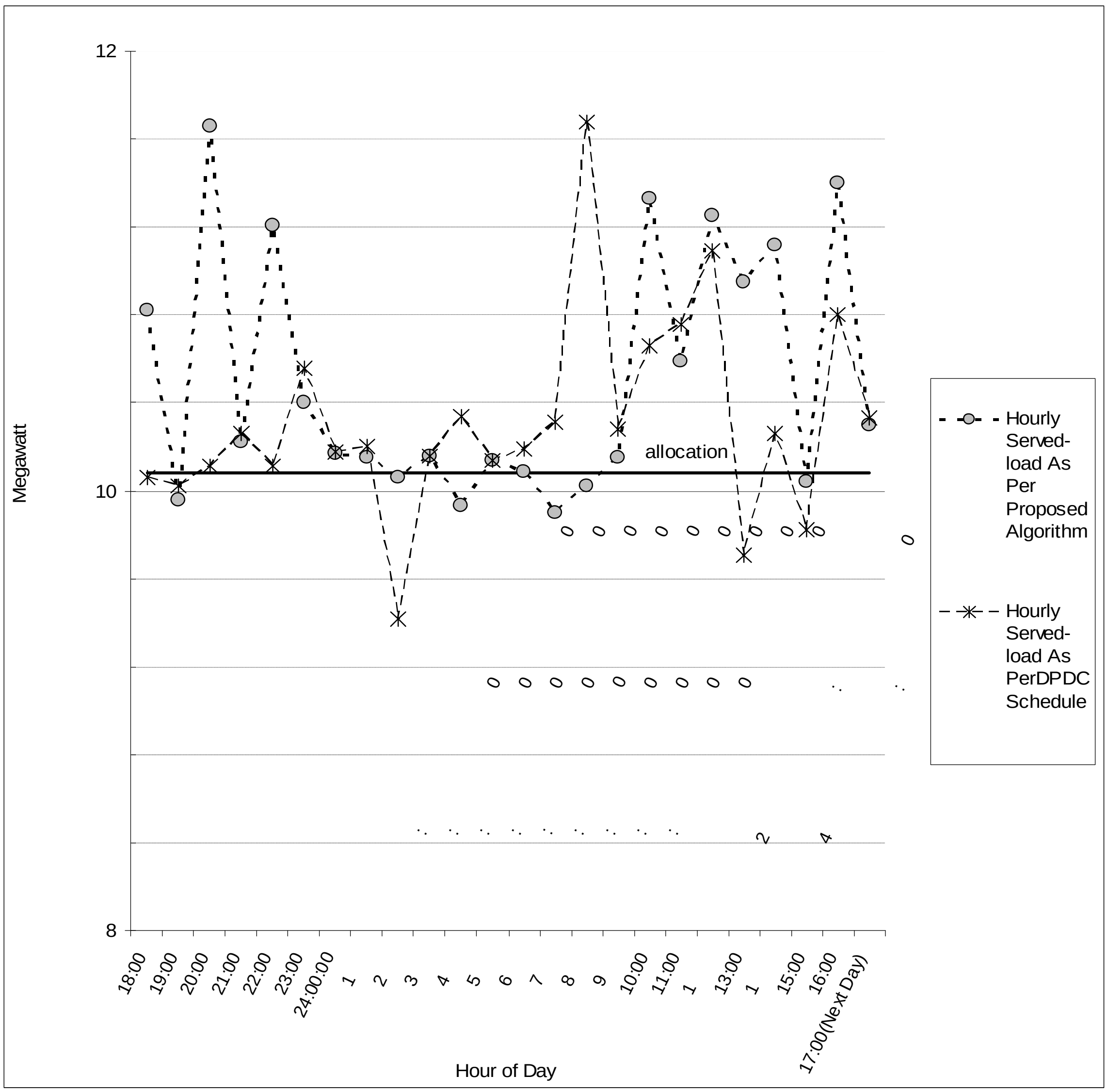


Figure 3.15: Hourly allocation vs. served load as per proposed and existing practice in Tejgaon SS.

But in the existing practice it has been found that served load exceeds the allocation by 1.09% to 15.87% in 14 intervals, which may cause under frequency in the system if other substations' served-load also exceed allocation similarly.

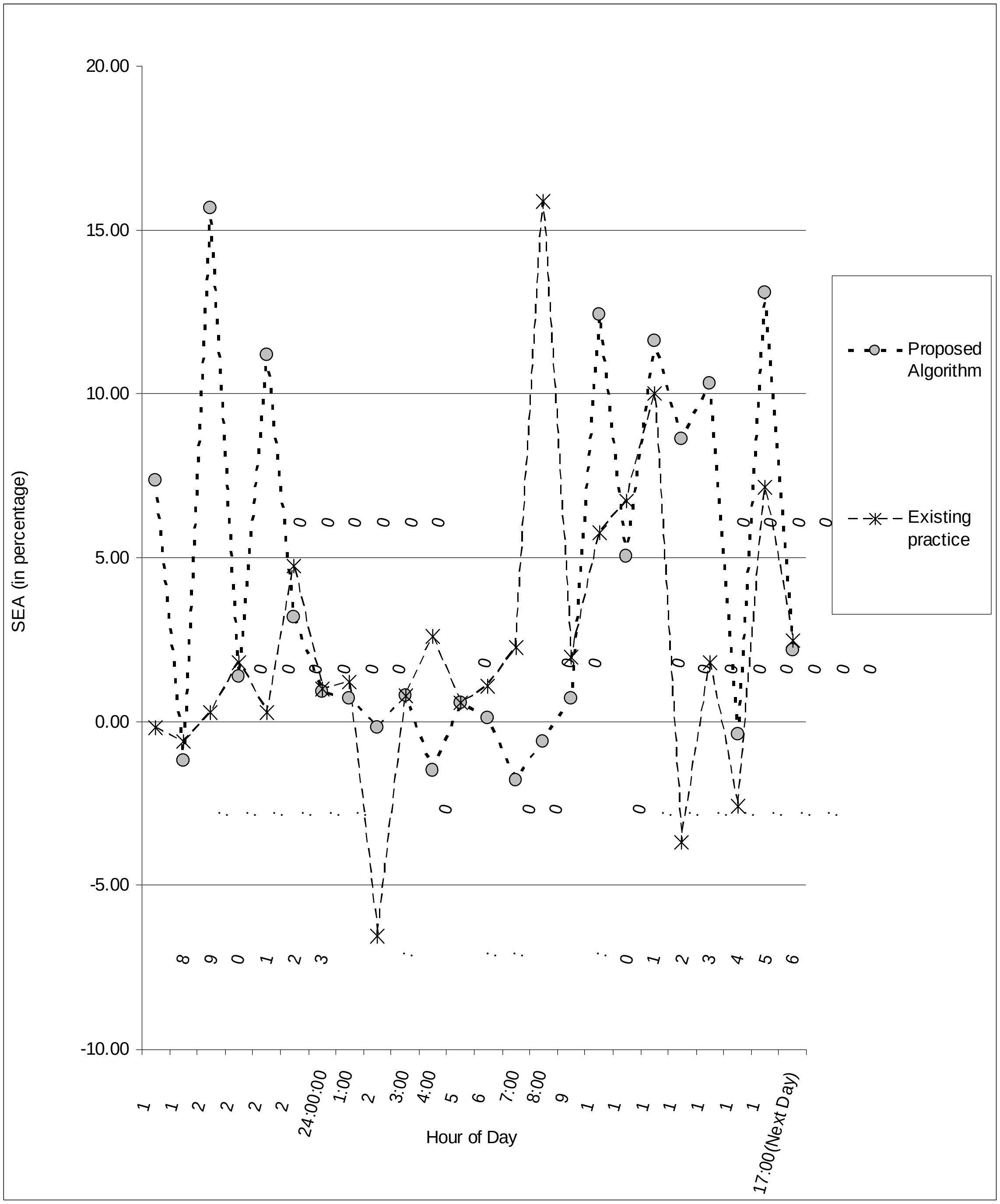


Figure 3.16: SEA in percentage by the proposed algorithm and existing practice in Tejgaon SS.

## 3.8 Comparison of Results for Five Substations

Table 3.6 shows a comparison of SEAMax, SEACount and ENS by the proposed algorithm and existing practice for all the 5 substations. It may be observed that supplied load exceeds allocation less number of times compared to the existing practice and the SEAMax is also less. The ENS amount by existing practice in some cases is less than that obtained by the proposed algorithm. This is obvious because in the existing practice the served load exceeds the allocation for a more number of times than that in the proposed algorithm and hence the existing practice is more likely to cause under frequency in the system.

Table 3.6: Comparison of key indices by the proposed algorithm and the existing practice for a load shed tolerance margin of 1%.

| Name of the substation | SEAMax (%) | | SEACount | | ENS (MWH) | |
|---|---|---|---|---|---|---|
| | Proposed | Existing | Proposed | Existing | Proposed | Existing |
| New Ramna | 0.99 | 7.82 | 0 | 5 | 209.82 | 214.84 |
| Banglabazar | 5.35 | 9.37 | 6 | 6 | 238.49 | 247.57 |
| Kamrangir Char | 6.53 | 86.59 | 6 | 20 | 377.52 | 218.22 |
| Lalmatia | 21.34 | 29.52 | 11 | 16 | 277.80 | 267.45 |
| Tejgaon | 15.67 | 15.87 | 12 | 14 | 153.22 | 157.79 |

It should be noted that in a typical power system if the total system load exceeds the generation by 10% then the steady-state frequency falls [16] by about 1%

# Chapter 4: Conclusion

## 4.1 Conclusion

In a generation deficit system load management through tripping the 11 kV distribution feeders is unavoidable. But most of the times the shed amount of load through feeder trips cannot prevent the served load being in excess of the allocation for a substation. This results in under frequency in the system so that eventually 33 kV feeders are tripped by under frequency relays and the corresponding substations totally remain without power until the relays are reset or the system frequency comes back within the allowed band.

The present research has attempted to decide the feeder trips through developing an algorithm. This targets searching for the optimally best combination of feeders to be tripped such that served load exceeds the allocation for a minimum number of times subject to the emergency, priority, preceding interval and must-on status of the feeders.

The developed algorithm has been tested extensively on DPDC System for five numbers of real-life 33/11 kV distribution substations each with 8 to 22 numbers of 11 kV feeders. It has been observed that in general the proposed algorithm reduces the number of occurrences when served load exceeds the allocation by more than1% (which is too conservative) compared to the existing practice in DPDC which is done in an arbitrary way. If the tolerance margin by which the served load will exceed allocation is allowed to increase this occurrence will be further less in the proposed algorithm. This will definitely help the system frequency to remain within the allowed band without causing under frequency relay operation. It should be further noted that the developed algorithm provides better results when the number of feeders in a substation is large.

## 4.3 Suggestions for Further Research

The proposed algorithm can be further enhanced by including customer’s interruption cost and utility’s revenue loss besides the feeder status related constraints considered in this work.

Also a correlation between the load shed tolerance margin and the change in system frequency may be incorporated in finding the optimal combination by the proposed algorithm.

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# Appendix A: Example Run of the Proposed Algorithm

## Input data

N = 5

T = 4

### Demand Schedule (in MW)

| Feeder Number | Hour 1 | Hour 2 | Hour 3 | Hour 4 |
|---|---|---|---|---|
| 1 | 3.0 | 3.2 | 1.2 | 2.2 |
| 2 | 2.3 | 2.1 | 2.3 | 2.5 |
| 3 | 1.5 | 3.5 | 3.1 | 1.8 |
| 4 | 2.3 | 3.2 | 2.8 | 0.8 |
| 5 | 1.2 | 2.8 | 3.2 | 3.2 |
| Total Demand | 10.3 | 14.8 | 12.6 | 10.5 |

### Hourly Power Allocation (in MW)

| | | | | |
|---|---|---|---|---|
| | 7.5 | 12 | 8 | 11 |

### Must-on Status

| Feeder Number | Status |
|---|---|
| 1 | 0 |
| 2 | 1 |
| 3 | 0 |
| 4 | 0 |
| 5 | 0 |

**Emergency Status**

| Feeder Number | Hour 1 | Hour 2 | Hour 3 | Hour 4 |
|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 1 |
| 2 | 0 | 0 | 0 | 0 |
| 3 | 0 | 0 | 0 | 0 |
| 4 | 0 | 1 | 0 | 0 |
| 5 | 0 | 0 | 0 | 0 |

**Feeder ranking or priority data**

| Feeder Number | Hour 1 | Hour 2 | Hour 3 | Hour 4 |
|---|---|---|---|---|
| 1 | 1 | 1 | 2 | 1 |
| 2 | 2 | 2 | 3 | 1 |
| 3 | 3 | 2 | 1 | 2 |
| 4 | 4 | 2 | 3 | 4 |
| 5 | 5 | 4 | 3 | 2 |

## Iterations for different combinations of load shedding

1. 1st Iteration : Starting slot, k = 1

   1.1. Initialize t, t=k

$$U = \begin{bmatrix} 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 \end{bmatrix}$$

   1.2. Load shedding requirement = demand – allocation = 10.3 -7.5 =**2.8 MW**

1.3. Feeder 1 in this slot can be shed because it is neither shed in previous hour nor in next hour.

1.4. Feeder 2 cannot be shed because it is a must on feeder.

1.5. Feeder 3, 4 and 5 can be shed because none of these is shed in next or previous hour.

1.6. Therefore there are 4 possible load shedding candidates in this hour: 1, 3, 4 and 5.

1.7. Number of possible combination is ${}^4C_1+{}^4C_2+{}^4C_3+{}^4C_4=15$. Corresponding load shedding amounts are :

| **Combination** | **Feeder Combination For load shedding** | **Load Shedding amount (in MW)** |
|---|---|---|
| 1 | 1 | 3 |
| 2 | 3 | 1.5 |
| 3 | 4 | 2.3 |
| 4 | 5 | 1.2 |
| 5 | 4,5 | 2.3+1.2=3.5 |
| 6 | 3,5 | 1.5+1.2=2.7 |
| 7 | 3,4 | 1.5+2.3=3.8 |
| 8 | 1,5 | 3+1.2=4.2 |
| 9 | 1,4 | 3+2.3=5.3 |
| 10 | 1,3 | 3+1.5=4.5 |
| 11 | 1,3,4 | 3+1.5+2.3=6.8 |
| 12 | 1,3,5 | 3+1.5+1.2=5.7 |
| 13 | 1,4,5 | 3+2.3+1.2=6.5 |
| 14 | 3,4,5 | 1.5+2.3+1.2=5.0 |
| 15 | 1,3,4,5 | 3+1.5+2.3+1.2=8.0 |

1.8. Demand in this hour is 10.3 MW and allocation is 7.5 MW. Therefore MaxRequiredLoadShedAmount = (10.3 -7.5) + 0.01 X 7.5 = 2.875 MW and MinRequiredLoadShedAmount = (10.3 -7.5) -0.01 X 7.5. = 2.772. Only combination 6 is in this tolerance. Therefore combination 6 can be selected as the optimum load shedding combination in this hour.

1.9. Now check the combination having least priority. As there is only one combination that meets the load shedding requirement it is the optimum one in this hour.

| Combination | Feeder Combination For load shedding | Feeder priority data |
|---|---|---|
| 6 | 3,5 | 3+5=8 |

1.10. Therefore combination 3, i.e. feeder 4 is the optimum load shedding combination for this hour. So U(1,3) & U(1,5) are set to zero. Therefore U becomes as below.

$$U=\begin{bmatrix} 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 \\ 0 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 \\ 0 & 1 & 1 & 1 \end{bmatrix}$$

1.11. Now t = 2 and follow 1.1 to 1.10 steps in similar way. In this hour feeder 2 is a must-on feeder, feeder 3 & 5 are shed in previous hour and feeder 4 is emergency feeder. Therefore only feeder 1 is the candidate for load shedding.

$$U=\begin{bmatrix} 1 & 0 & 1 & 1 \\ 1 & 1 & 1 & 1 \\ 0 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 \\ 0 & 1 & 1 & 1 \end{bmatrix}$$

1.12. Now t=3 and follow 1.1 to 1.10 steps to find load shedding pattern for this hour. In this hour candidate load shedding feeders are 3, 4 and 5. Following table shows all possible combination. Required Load shedding

Amount=12.6-8 = 4.6 MW. MaxRequiredLoadShedAmount = 4.6 +.08 =4.68MW and MinRequiredLoaddShedAmmount = 4.6 - .08 = 3.8MW.

| **Combination** | **Feeder Combination For load shedding** | **Possible Shedding amount (in MW)** | **Possible Shedding Amount – 4.6** |
|---|---|---|---|
| 1 | 3 | 3.1 | -1.5 |
| 2 | 4 | 2.8 | -1.8 |
| 3 | 5 | 3.2 | -1.4 |
| 4 | 3,4 | 5.9 | 1.3 |
| 5 | 3,5 | 6.3 | 1.7 |
| 6 | 4,5 | 6.0 | 1.4 |
| 7 | 3,4,5 | 9.7 | 5.1 |

None of the combination falls in this band. Therefore the combination which is closest to the load shedding requirement is taken as the optimum one. Combination 3 is the optimum combination.

1.13. So U becomes as below.

$$U=\begin{bmatrix} 1 & 0 & 1 & 1 \\ 1 & 1 & 1 & 1 \\ 0 & 1 & 0 & 1 \\ 1 & 1 & 0 & 1 \\ 0 & 1 & 1 & 1 \end{bmatrix}$$

1.14. Now t=4. Demand in this hour is 10 which is equal to allocation for this hour. There fore no load shedding is required.

$$U=\begin{bmatrix} 1 & 0 & 1 & 1 \\ 1 & 1 & 1 & 1 \\ 0 & 1 & 0 & 1 \\ 1 & 1 & 0 & 1 \\ 0 & 1 & 1 & 1 \end{bmatrix}$$

1.15. Therefore U is the total load shedding pattern for whole day.

$UR_{i,t,k} = U_{i,t}$ for all values of i and t.

2. $2^{nd}$ Iteration: Starting slot, k = 2. Step 1.1 to step 1.15 is followed to get the second combination. The combination becomes as shown below.

$$U= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 1 & 1 & 1 & 1 \\ 1 & 1 & 0 & 1 \\ 1 & 1 & 1 & 1 \\ 1 & 0 & 1 & 1 \end{bmatrix}$$

$UR_{i,t,k} = U_{i,t}$ for all values of i and t.

3. $3^{rd}$ Iteration: Starting slot, k = 3. Step 1.1 to step 1.15 is followed to get the third combination. The combination becomes as shown below.

$$U= \begin{bmatrix} 1 & 1 & 0 & 1 \\ 1 & 1 & 1 & 1 \\ 0 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 \\ 0 & 1 & 0 & 1 \end{bmatrix}$$

$UR_{i,t,k} = U_{i,t}$ for all values of i and t.

4. $4^{th}$ iteration: Starting slot, k=4.

$$U= \begin{bmatrix} 1 & 0 & 1 & 1 \\ 1 & 1 & 1 & 1 \\ 0 & 1 & 0 & 1 \\ 1 & 1 & 0 & 1 \\ 0 & 1 & 1 & 1 \end{bmatrix}$$

$UR_{i,t,k} = U_{i,t}$ for all values of i and t.

5. Calculation for combination 1. Hourly supplied load is shown in the following table to calculate %SEA.

| | Hour1 | Hour2 | Hour3 | Hour4 |
|---|---|---|---|---|
| Feeder1 | 3 | 0 | 1.2 | 2.2 |
| Feeder2 | 2.3 | 2.1 | 2.3 | 2.5 |
| Feeder3 | 0 | 3.5 | 0 | 1.8 |
| Feeder4 | 2.3 | 3.2 | 0 | 0.8 |
| Feeder5 | 0 | 2.8 | 3.2 | 3.2 |
| **Total Supplied Load** | **7.6** | **11.6** | **6.7** | **10.5** |
| **Allocation** | **7.5** | **12** | **8** | **11** |
| **Total Demand** | **10.3** | **14.8** | **12.6** | **10.5** |
| **%SEA [(Supplied Load - Allocation)X100/Allocation]** | **1.333** | **-3.333** | **-16.3** | **-4.55** |
| **Energy Not Served (ENS)** | **2.7** | **3.2** | **5.9** | **0** |

Therefore maximum SEA is 1.333 and count of SEA is 1. Energy not supplied is calculated by multiplying shed load with slot duration. Considering slot duration equals to 1 hour ENS for this combination is 2.7 + 3.2 + 5.9 = 11.8 MWH

In the similar way %SEA, %SEAMax, SEACount and ENS are calculated for each of the combinations stored in UR.

| Different Combinations | %SEA of different hours | | | | SEA Max | SEA Count | ENS (MWH) |
|---|---|---|---|---|---|---|---|
| | Hour1 | Hour2 | Hour3 | Hour4 | | | |
| Comb 1 | 1.33 | -3.33 | -16.25 | -4.55 | 1.33 | 1 | 11.8 |
| Comb 2 | -2.67 | 0 | 3.75 | -4.55 | 3.75 | 1 | 10.1 |
| Comb 3 | 1.33 | 23.33 | 2.5 | -4.55 | 23.33 | 3 | 7.1 |
| Comb 4 | 1.33 | -3.33 | -16.25 | -4.55 | 1.33 | 1 | 11.8 |

6. Combination 1 and 4 have minimum SEAMax. Therefore any of these two combinations can be the optimum one. Among them combination both have

minimum ENS and SEACount. Therefore any of the 1st and 4th combination can be the final result. Combination 1 is selected as the final combination.

Final result:

$$U = \begin{bmatrix} 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 \\ 0 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 \\ 0 & 1 & 1 & 1 \end{bmatrix}$$

**Table E.6: Load Shedding Schedule As Per Existing Practice**

| | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 (Next Day) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **GPO** | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 |
| **Bangladesh Math** | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| **Secreteriat East** | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **Siddik Bazar** | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| **Bakshi Bazar** | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 |
| **T and T** | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **Secreteriat West** | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **Baitul Mokarram** | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 |
| **DIT 2** | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| **Jail SWSS** | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 |
| **Police Bhaban** | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **Water Works** | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| **Shegunbagicha** | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 |
| **Press Club** | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **Ramna Local** | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **Topkhana** | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| **Rail Bhaban** | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **Transport Pole** | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **Purana Paltan** | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 |
| **Kazi Alauddin Rd** | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| **Mohanagar Nattomoncho** | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| **Gulistan Complex** | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| **allocation =>** | **29** | **29** | **29** | **29** | **29** | **29** | **29** | **29** | **29** | **29** | **29** | **29** | **29** | **31** | **31** | **31** | **31** | **31** | **31** | **31** | **31** | **31** | **31** | **31** |
| **supplied load =>** | **27.85** | **31.06** | **30.36** | **31.21** | **28.3** | **26.73** | **24.28** | **22.22** | **21.52** | **21.14** | **20.89** | **20.89** | **20.89** | **21.52** | **23.92** | **30.29** | **30.42** | **29.85** | **31.35** | **28.25** | **29.52** | **33.08** | **30.03** | **30.61** |
| **total Demand =>** | **49.76** | **49.24** | **46.11** | **40.91** | **33.63** | **29.4** | **24.28** | **22.22** | **21.52** | **21.14** | **20.89** | **20.89** | **20.89** | **21.52** | **23.92** | **37.12** | **44.08** | **47.18** | **48.77** | **48.77** | **48.27** | **47.77** | **47.61** | **45.13** |
| **SEAMax** | **7.82** | | | | | | | | | | | | | | | | | | | | | | | |
| **SEACount** | **5** | | | | | | | | | | | | | | | | | | | | | | | |
| **ENS** | **214.84** | | | | | | | | | | | | | | | | | | | | | | | |

## Input data for New Ramna 33/11 KV Substation

**Number of Feeders : 22**
**Number of Slots : 24**

**Table E.1: Feeder Wise Demand Schedul in MW**

| | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **GPO** | 2.5 | 2.67 | 2.67 | 1.85 | 1 | 0.67 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 1.5 | 2 | 2.5 | 2.67 | 2.67 | 2.67 | 2.67 | 2.67 | 2.5 |
| **Bangladesh Math** | 3.5 | 4.17 | 4.33 | 4 | 3.33 | 3 | 2.67 | 2.67 | 2.67 | 2.67 | 2.67 | 2.67 | 2.67 | 2.67 | 2.67 | 3 | 3.33 | 3.33 | 3.33 | 3.33 | 3.33 | 3.33 | 3.33 | 3.33 |
| **Secreteriat East** | 0.5 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.67 | 1.67 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.67 | 1 |
| **Siddik Bazar** | 3.83 | 4.66 | 4.66 | 4 | 2.33 | 2 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 2.83 | 3.5 | 3.5 | 3.67 | 3.67 | 3.67 | 3.67 | 3.67 | 3.67 |
| **Bakshi Bazar** | 4.16 | 4.16 | 3.5 | 3 | 3 | 2.6 | 2 | 1.5 | 1.3 | 1.25 | 1 | 1 | 1 | 1.3 | 1.3 | 2 | 2.5 | 2.5 | 3 | 3 | 3 | 2.5 | 2.5 | 3 |
| **T and T** | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.33 | 0.5 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.5 |
| **Secreteriat West** | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.5 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.5 |
| **Baitul Mokarram** | 1.2 | 1.35 | 1.25 | 1.25 | 1.17 | 0.67 | 0.5 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.33 | 0.5 | 0.67 | 0.67 | 1.17 | 1.17 | 1.17 | 1.17 | 1.2 |
| **DIT 2** | 5.5 | 5.45 | 4 | 3.67 | 2.5 | 2 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 5 | 5.25 | 5.5 | 5.5 | 5.5 | 5 | 5 | 5 | 3.33 |
| **Jail SWSS** | 5 | 5 | 5 | 4 | 3.67 | 3.33 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3.33 | 3.33 | 3.85 | 3.85 | 3.85 | 3.85 | 3.85 | 3.85 | 3.85 |
| **Police Bhaban** | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.3 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| **Water Works** | 5.5 | 5.5 | 5.5 | 5.5 | 4.5 | 4.5 | 3.33 | 3.33 | 3.33 | 3.33 | 3.33 | 3.33 | 3.33 | 3.33 | 3.33 | 5 | 5.5 | 5.5 | 5.5 | 5 | 5 | 5 | 5 | 5 |
| **Shegunbagicha** | 2.83 | 2.2 | 2.2 | 1.7 | 1.67 | 1.5 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.5 | 1.5 | 1.5 | 1.67 | 2.83 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| **Press Club** | 1.83 | 1.1 | 0.85 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.5 | 1 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 | 1.83 |
| **Ramna Local** | 0.5 | 0.25 | 0.25 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| **Topkhana** | 2.5 | 2.33 | 2 | 2 | 2 | 1.33 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.33 | 2 | 2.67 | 2.67 | 2.67 | 2.67 | 2.67 | 2.67 | 2.67 | 2.67 |
| **Rail Bhaban** | 0.5 | 0.25 | 0.25 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| **Transport Pole** | 0.17 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.17 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.17 |
| **Purana Paltan** | 2.5 | 2.5 | 2 | 1.8 | 1.6 | 1 | 0.75 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 1.5 | 1.8 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| **Kazi Alauddin Rd** | 5.58 | 5.58 | 5.58 | 5.58 | 4.5 | 4.5 | 4 | 3.5 | 3 | 2.67 | 2.67 | 2.67 | 2.67 | 2.67 | 2.67 | 4 | 4.33 | 4.5 | 5.58 | 5.58 | 5.58 | 5.58 | 5.58 | 5.58 |
| **Mohanagar Nattomoncho** | 0.33 | 0.33 | 0.33 | 0.33 | 0.2 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.2 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 |
| **Gulistan Complex** | 0.17 | 0.17 | 0.17 | 0.17 | 0.1 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.1 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 |

### Hourly Power Allocation for This Substaion

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 |

**Table E.2: Priority Data for Feeders**

| | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **GPO** | 2.50 | 2.67 | 2.67 | 1.85 | 1.00 | 0.67 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 1.50 | 2.00 | 2.50 | 2.67 | 2.67 | 2.67 | 2.67 | 2.67 | 2.50 |
| **Bangladesh Math** | 3.50 | 4.17 | 4.33 | 4.00 | 3.33 | 3.00 | 2.67 | 2.67 | 2.67 | 2.67 | 2.67 | 2.67 | 2.67 | 2.67 | 2.67 | 3.00 | 3.33 | 3.33 | 3.33 | 3.33 | 3.33 | 3.33 | 3.33 | 3.33 |
| **Secreteriat East** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| **Siddik Bazar** | 3.83 | 4.66 | 4.66 | 4.00 | 2.33 | 2.00 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 2.83 | 3.50 | 3.50 | 3.67 | 3.67 | 3.67 | 3.67 | 3.67 | 3.67 |
| **Bakshi Bazar** | 4.16 | 4.16 | 3.50 | 3.00 | 3.00 | 2.60 | 2.00 | 1.50 | 1.30 | 1.25 | 1.00 | 1.00 | 1.00 | 1.30 | 1.30 | 2.00 | 2.50 | 2.50 | 3.00 | 3.00 | 3.00 | 2.50 | 2.50 | 3.00 |
| **T and T** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| **Secreteriat West** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| **Baitul Mokarram** | 1.20 | 1.35 | 1.25 | 1.25 | 1.17 | 0.67 | 0.50 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.33 | 0.50 | 0.67 | 0.67 | 1.17 | 1.17 | 1.17 | 1.17 | 1.20 |
| **DIT 2** | 5.50 | 5.45 | 4.00 | 3.67 | 2.50 | 2.00 | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 | 5.00 | 5.25 | 5.50 | 5.50 | 5.50 | 5.00 | 5.00 | 5.00 | 3.33 |
| **Jail SWSS** | 5.00 | 5.00 | 5.00 | 4.00 | 3.67 | 3.33 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.33 | 3.33 | 3.85 | 3.85 | 3.85 | 3.85 | 3.85 | 3.85 | 3.85 |
| **Police Bhaban** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| **Water Works** | 5.50 | 5.50 | 5.50 | 5.50 | 4.50 | 4.50 | 3.33 | 3.33 | 3.33 | 3.33 | 3.33 | 3.33 | 3.33 | 3.33 | 3.33 | 5.00 | 5.50 | 5.50 | 5.50 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 |
| **Shegunbagicha** | 2.83 | 2.20 | 2.20 | 1.70 | 1.67 | 1.50 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.50 | 1.50 | 1.50 | 1.67 | 2.83 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 |
| **Press Club** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| **Ramna Local** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| **Topkhana** | 2.50 | 2.33 | 2.00 | 2.00 | 2.00 | 1.33 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.33 | 2.00 | 2.67 | 2.67 | 2.67 | 2.67 | 2.67 | 2.67 | 2.67 | 2.67 |
| **Rail Bhaban** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| **Transport Pole** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| **Purana Paltan** | 2.50 | 2.50 | 2.00 | 1.80 | 1.60 | 1.00 | 0.75 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 1.50 | 1.80 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 |
| **Kazi Alauddin Rd** | 5.58 | 5.58 | 5.58 | 5.58 | 4.50 | 4.50 | 4.00 | 3.50 | 3.00 | 2.67 | 2.67 | 2.67 | 2.67 | 2.67 | 2.67 | 4.00 | 4.33 | 4.50 | 5.58 | 5.58 | 5.58 | 5.58 | 5.58 | 5.58 |
| **Mohanagar Nattomoncho** | 0.33 | 0.33 | 0.33 | 0.33 | 0.20 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.20 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 |
| **Gulistan Complex** | 0.17 | 0.17 | 0.17 | 0.17 | 0.10 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.10 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 |

Note: ** means those feeders are must-on feeders

**Table E.3: Emergency Status**

| | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **GPO** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Bangladesh Math** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Secreteriat East** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Siddik Bazar** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Bakshi Bazar** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **T and T** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Secreteriat West** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Baitul Mokarram** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **DIT 2** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Jail SWSS** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Police Bhaban** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Water Works** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Shegunbagicha** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Press Club** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Ramna Local** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Topkhana** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Rail Bhaban** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Transport Pole** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Purana Paltan** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Kazi Alauddin Rd** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Mohanagar Nattomoncho** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Gulistan Complex** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Table E.4: Must-On Status of Feeders**

| | |
|---|---|
| **GPO** | 0 |
| **Bangladesh Math** | 0 |
| **Secreteriat East** | 1 |
| **Siddik Bazar** | 0 |
| **Bakshi Bazar** | 0 |
| **T and T** | 1 |
| **Secreteriat West** | 1 |
| **Baitul Mokarram** | 0 |
| **DIT 2** | 0 |
| **Jail SWSS** | 0 |
| **Police Bhaban** | 1 |
| **Water Works** | 0 |
| **Shegunbagicha** | 0 |
| **Press Club** | 1 |
| **Ramna Local** | 1 |
| **Topkhana** | 0 |
| **Rail Bhaban** | 1 |
| **Transport Pole** | 1 |
| **Purana Paltan** | 0 |
| **Kazi Alauddin Rd** | 0 |
| **Mohanagar Nattomoncho** | 0 |
| **Gulistan Complex** | 0 |

**Table E.5: Output Potential Combinations**

**Combination 1**

| | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00(Next Day) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| **allocation =** | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 |
| **supplied load** | 29.44 | 29.38 | 29.44 | 29.44 | 29.43 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 30.96 | 30.92 | 30.85 | 30.85 | 30.92 | 30.93 | 30.92 | 30.86 | 31.93 |
| **total Demand** | 49.76 | 49.24 | 46.11 | 40.91 | 33.63 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 37.12 | 44.08 | 47.18 | 48.77 | 48.77 | 48.27 | 47.77 | 47.61 | 45.13 |
| **SEAMax** | 4.07 | | | | | | | | | | | | | | | | | | | | | | | |
| **SEACount** | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| **ENS** | 208.1 | | | | | | | | | | | | | | | | | | | | | | | |

**Combination 2**

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| **allocation =** | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 |
| **supplied load** | 30.52 | 29.45 | 29.41 | 29.41 | 29.36 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 30.96 | 30.92 | 30.85 | 30.85 | 30.92 | 30.93 | 30.92 | 30.86 | 30.96 |
| **total Demand** | 49.76 | 49.24 | 46.11 | 40.91 | 33.63 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 37.12 | 44.08 | 47.18 | 48.77 | 48.77 | 48.27 | 47.77 | 47.61 | 45.13 |
| **SEAMax** | 4.66 | | | | | | | | | | | | | | | | | | | | | | | |
| **SEACount** | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| **ENS** | 208 | | | | | | | | | | | | | | | | | | | | | | | |

Continued .

| | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00(Next Day) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Combination 3** | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| **allocation =** | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 |
| **supplied load** | 29.32 | 28.75 | 29.45 | 29.41 | 29.43 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 30.96 | 30.92 | 30.85 | 30.85 | 30.92 | 30.93 | 30.92 | 30.86 | 30.96 |
| **total Demand** | 49.76 | 49.24 | 46.11 | 40.91 | 33.63 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 37.12 | 44.08 | 47.18 | 48.77 | 48.77 | 48.27 | 47.77 | 47.61 | 45.13 |
| **SEAMax** | 0.99 | | | | | | | | | | | | | | | | | | | | | | | |
| **SEACount** | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| **ENS** | 209.8 | | | | | | | | | | | | | | | | | | | | | | | |
| **Combination 4** | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| **allocation =** | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 |
| **supplied load** | 29.32 | 29.62 | 30.86 | 29.45 | 29.43 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 30.96 | 30.92 | 30.85 | 30.85 | 30.92 | 30.93 | 30.92 | 30.86 | 30.96 |
| **total Demand** | 49.76 | 49.24 | 46.11 | 40.91 | 33.63 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 37.12 | 44.08 | 47.18 | 48.77 | 48.77 | 48.27 | 47.77 | 47.61 | 45.13 |
| **SEAMax** | 5.83 | | | | | | | | | | | | | | | | | | | | | | | |
| **SEACount** | 2 | | | | | | | | | | | | | | | | | | | | | | | |
| **ENS** | 207.5 | | | | | | | | | | | | | | | | | | | | | | | |

Continued .

| | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00(Next Day) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Combination 5** | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| **allocation =** | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 |
| **supplied load** | 29.32 | 29.62 | 29.33 | 29.33 | 29.43 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 30.96 | 30.92 | 30.85 | 30.85 | 30.92 | 30.93 | 30.92 | 30.86 | 30.96 |
| **total Demand** | 49.76 | 49.24 | 46.11 | 40.91 | 33.63 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 37.12 | 44.08 | 47.18 | 48.77 | 48.77 | 48.27 | 47.77 | 47.61 | 45.13 |
| **SEAMax** | 1.58 | | | | | | | | | | | | | | | | | | | | | | | |
| **SEACount** | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| **ENS** | 209.2 | | | | | | | | | | | | | | | | | | | | | | | |
| **Combination 6** | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| **allocation =** | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 |
| **supplied load** | 29.32 | 29.62 | 29.33 | 29.44 | 29.43 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 30.96 | 30.92 | 30.85 | 30.85 | 30.92 | 30.93 | 30.92 | 30.86 | 30.96 |
| **total Demand** | 49.76 | 49.24 | 46.11 | 40.91 | 33.63 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 37.12 | 44.08 | 47.18 | 48.77 | 48.77 | 48.27 | 47.77 | 47.61 | 45.13 |
| **SEAMax** | 1.58 | | | | | | | | | | | | | | | | | | | | | | | |
| **SEACount** | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| **ENS** | 209 | | | | | | | | | | | | | | | | | | | | | | | |

Continued .

| | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00(Next Day) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Combination 7** | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| **allocation =** | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 |
| **supplied load** | 29.32 | 29.62 | 29.33 | 29.44 | 29.43 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 30.96 | 30.92 | 30.85 | 30.85 | 30.92 | 30.93 | 30.92 | 30.86 | 30.96 |
| **total Demand** | 49.76 | 49.24 | 46.11 | 40.91 | 33.63 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 37.12 | 44.08 | 47.18 | 48.77 | 48.77 | 48.27 | 47.77 | 47.61 | 45.13 |
| **SEAMax** | 1.58 | | | | | | | | | | | | | | | | | | | | | | | |
| **SEACount** | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| **ENS** | 209 | | | | | | | | | | | | | | | | | | | | | | | |


| | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00(Next Day) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Combination 8** | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| **allocation =** | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 |
| **supplied load** | 29.32 | 29.62 | 29.33 | 29.44 | 29.43 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 30.96 | 30.92 | 30.85 | 30.85 | 30.92 | 30.93 | 30.92 | 30.86 | 30.96 |
| **total Demand** | 49.76 | 49.24 | 46.11 | 40.91 | 33.63 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 37.12 | 44.08 | 47.18 | 48.77 | 48.77 | 48.27 | 47.77 | 47.61 | 45.13 |
| **SEAMax** | 1.58 | | | | | | | | | | | | | | | | | | | | | | | |
| **SEACount** | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| **ENS** | 209 | | | | | | | | | | | | | | | | | | | | | | | |


Continued .

| | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00(Next Day) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Combination 9** | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| **allocation =** | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 |
| **supplied load** | 29.32 | 29.62 | 29.33 | 29.44 | 29.43 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 30.96 | 30.92 | 30.85 | 30.85 | 30.92 | 30.93 | 30.92 | 30.86 | 30.96 |
| **total Demand** | 49.76 | 49.24 | 46.11 | 40.91 | 33.63 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 37.12 | 44.08 | 47.18 | 48.77 | 48.77 | 48.27 | 47.77 | 47.61 | 45.13 |
| **SEAMax** | 1.58 | | | | | | | | | | | | | | | | | | | | | | | |
| **SEACount** | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| **ENS** | 209 | | | | | | | | | | | | | | | | | | | | | | | |

| | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00(Next Day) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Combination 10** | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| **allocation =** | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 |
| **supplied load** | 29.32 | 29.62 | 29.33 | 29.44 | 29.43 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 30.96 | 30.92 | 30.85 | 30.85 | 30.92 | 30.93 | 30.92 | 30.86 | 30.96 |
| **total Demand** | 49.76 | 49.24 | 46.11 | 40.91 | 33.63 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 37.12 | 44.08 | 47.18 | 48.77 | 48.77 | 48.27 | 47.77 | 47.61 | 45.13 |
| **SEAMax** | 1.58 | | | | | | | | | | | | | | | | | | | | | | | |
| **SEACount** | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| **ENS** | 209 | | | | | | | | | | | | | | | | | | | | | | | |

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| | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00(Next Day) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Combination 11** | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| **allocation =** | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 |
| **supplied load** | 29.32 | 29.62 | 29.33 | 29.44 | 29.43 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 30.96 | 30.92 | 30.85 | 30.85 | 30.92 | 30.93 | 30.92 | 30.86 | 30.96 |
| **total Demand** | 49.76 | 49.24 | 46.11 | 40.91 | 33.63 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 37.12 | 44.08 | 47.18 | 48.77 | 48.77 | 48.27 | 47.77 | 47.61 | 45.13 |
| **SEAMax** | 1.58 | | | | | | | | | | | | | | | | | | | | | | | |
| **SEACount** | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| **ENS** | 209 | | | | | | | | | | | | | | | | | | | | | | | |

| | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00(Next Day) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Combination 12** | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| **allocation =** | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 |
| **supplied load** | 29.32 | 29.62 | 29.33 | 29.44 | 29.43 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 30.96 | 30.92 | 30.85 | 30.85 | 30.92 | 30.93 | 30.92 | 30.86 | 30.96 |
| **total Demand** | 49.76 | 49.24 | 46.11 | 40.91 | 33.63 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 37.12 | 44.08 | 47.18 | 48.77 | 48.77 | 48.27 | 47.77 | 47.61 | 45.13 |
| **SEAMax** | 1.58 | | | | | | | | | | | | | | | | | | | | | | | |
| **SEACount** | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| **ENS** | 209 | | | | | | | | | | | | | | | | | | | | | | | |

Continued .

| | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00(Next Day) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Combination 13** | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| **allocation =** | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 |
| **supplied load** | 29.32 | 29.62 | 29.33 | 29.44 | 29.43 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 30.96 | 30.92 | 30.85 | 30.85 | 30.92 | 30.93 | 30.92 | 30.86 | 30.96 |
| **total Demand** | 49.76 | 49.24 | 46.11 | 40.91 | 33.63 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 37.12 | 44.08 | 47.18 | 48.77 | 48.77 | 48.27 | 47.77 | 47.61 | 45.13 |
| **SEAMax** | 1.58 | | | | | | | | | | | | | | | | | | | | | | | |
| **SEACount** | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| **ENS** | 209 | | | | | | | | | | | | | | | | | | | | | | | |
| **Combination 14** | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| **allocation =** | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 |
| **supplied load** | 29.32 | 29.62 | 29.33 | 29.44 | 29.43 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 30.96 | 30.92 | 30.85 | 30.85 | 30.92 | 30.93 | 30.92 | 30.86 | 30.96 |
| **total Demand** | 49.76 | 49.24 | 46.11 | 40.91 | 33.63 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 37.12 | 44.08 | 47.18 | 48.77 | 48.77 | 48.27 | 47.77 | 47.61 | 45.13 |
| **SEAMax** | 1.58 | | | | | | | | | | | | | | | | | | | | | | | |
| **SEACount** | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| **ENS** | 209 | | | | | | | | | | | | | | | | | | | | | | | |

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| | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00(Next Day) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Combination 15** | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| **allocation =** | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 |
| **supplied load** | 29.32 | 29.62 | 29.33 | 29.44 | 29.43 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 30.96 | 30.92 | 30.85 | 30.85 | 30.92 | 30.93 | 30.92 | 30.86 | 30.96 |
| **total Demand** | 49.76 | 49.24 | 46.11 | 40.91 | 33.63 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 37.12 | 44.08 | 47.18 | 48.77 | 48.77 | 48.27 | 47.77 | 47.61 | 45.13 |
| **SEAMax** | 1.58 | | | | | | | | | | | | | | | | | | | | | | | |
| **SEACount** | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| **ENS** | 209 | | | | | | | | | | | | | | | | | | | | | | | |
| **Combination 16** | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| **allocation =** | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 |
| **supplied load** | 29.32 | 29.62 | 29.33 | 29.44 | 29.43 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 30.96 | 30.92 | 30.85 | 30.85 | 30.92 | 30.93 | 30.92 | 30.86 | 30.96 |
| **total Demand** | 49.76 | 49.24 | 46.11 | 40.91 | 33.63 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 37.12 | 44.08 | 47.18 | 48.77 | 48.77 | 48.27 | 47.77 | 47.61 | 45.13 |
| **SEAMax** | 1.58 | | | | | | | | | | | | | | | | | | | | | | | |
| **SEACount** | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| **ENS** | 209 | | | | | | | | | | | | | | | | | | | | | | | |

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| | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00(Next Day) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Combination 17** | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| **allocation =** | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 |
| **supplied load** | 29.32 | 29.62 | 29.33 | 29.44 | 29.43 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 30.96 | 30.92 | 30.85 | 30.85 | 30.92 | 30.93 | 30.92 | 30.86 | 30.96 |
| **total Demand** | 49.76 | 49.24 | 46.11 | 40.91 | 33.63 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 37.12 | 44.08 | 47.18 | 48.77 | 48.77 | 48.27 | 47.77 | 47.61 | 45.13 |
| **SEAMax** | 1.58 | | | | | | | | | | | | | | | | | | | | | | | |
| **SEACount** | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| **ENS** | 209 | | | | | | | | | | | | | | | | | | | | | | | |

| | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00(Next Day) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Combination 18** | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| **allocation =** | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 |
| **supplied load** | 29.43 | 29.65 | 29.12 | 29.39 | 29.43 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 30.96 | 30.92 | 30.85 | 30.85 | 30.92 | 30.93 | 30.85 | 30.92 | 30.89 |
| **total Demand** | 49.76 | 49.24 | 46.11 | 40.91 | 33.63 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 37.12 | 44.08 | 47.18 | 48.77 | 48.77 | 48.27 | 47.77 | 47.61 | 45.13 |
| **SEAMax** | 1.68 | | | | | | | | | | | | | | | | | | | | | | | |
| **SEACount** | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| **ENS** | 209.2 | | | | | | | | | | | | | | | | | | | | | | | |

Continued .

| | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00(Next Day) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Combination 19** | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| **allocation =** | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 |
| **supplied load** | 29.35 | 29.4 | 29.28 | 29.41 | 29.43 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 30.96 | 30.92 | 31.66 | 30.94 | 30.83 | 30.94 | 30.91 | 30.86 | 30.97 |
| **total Demand** | 49.76 | 49.24 | 46.11 | 40.91 | 33.63 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 37.12 | 44.08 | 47.18 | 48.77 | 48.77 | 48.27 | 47.77 | 47.61 | 45.13 |
| **SEAMax** | 3.19 | | | | | | | | | | | | | | | | | | | | | | | |
| **SEACount** | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| **ENS** | 208.5 | | | | | | | | | | | | | | | | | | | | | | | |
| **Combination 20** | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| **allocation =** | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 |
| **supplied load** | 29.43 | 29.65 | 29.12 | 29.39 | 29.43 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 30.96 | 30.92 | 30.85 | 35.83 | 30.94 | 30.91 | 30.77 | 30.92 | 30.89 |
| **total Demand** | 49.76 | 49.24 | 46.11 | 40.91 | 33.63 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 37.12 | 44.08 | 47.18 | 48.77 | 48.77 | 48.27 | 47.77 | 47.61 | 45.13 |
| **SEAMax** | 16.79 | | | | | | | | | | | | | | | | | | | | | | | |
| **SEACount** | 2 | | | | | | | | | | | | | | | | | | | | | | | |
| **ENS** | 204.3 | | | | | | | | | | | | | | | | | | | | | | | |

Continued .

| | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00(Next Day) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Combination 21** | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 |
| **allocation =** | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 |
| **supplied load** | 29.35 | 29.4 | 29.28 | 29.41 | 29.43 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 30.96 | 30.92 | 30.85 | 30.85 | 34.25 | 30.94 | 30.91 | 30.86 | 30.97 |
| **total Demand** | 49.76 | 49.24 | 46.11 | 40.91 | 33.63 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 37.12 | 44.08 | 47.18 | 48.77 | 48.77 | 48.27 | 47.77 | 47.61 | 45.13 |
| **SEAMax** | 11.64 | | | | | | | | | | | | | | | | | | | | | | | |
| **SEACount** | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| **ENS** | 206 | | | | | | | | | | | | | | | | | | | | | | | |
| **Combination 22** | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| **allocation =** | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 |
| **supplied load** | 29.36 | 29.44 | 29.33 | 29.41 | 29.36 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 30.96 | 30.92 | 30.85 | 30.85 | 30.92 | 33.02 | 30.93 | 30.86 | 30.97 |
| **total Demand** | 49.76 | 49.24 | 46.11 | 40.91 | 33.63 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 37.12 | 44.08 | 47.18 | 48.77 | 48.77 | 48.27 | 47.77 | 47.61 | 45.13 |
| **SEAMax** | 7.63 | | | | | | | | | | | | | | | | | | | | | | | |
| **SEACount** | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| **ENS** | 207.2 | | | | | | | | | | | | | | | | | | | | | | | |

Continued .

| | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00(Next Day) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Combination 23** | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 |
| | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| **allocation =** | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 |
| **supplied load** | 29.43 | 29.35 | 29.45 | 29.44 | 29.3 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 30.96 | 30.92 | 30.85 | 30.85 | 30.92 | 30.93 | 32.17 | 30.94 | 30.85 |
| **total Demand** | 49.76 | 49.24 | 46.11 | 40.91 | 33.63 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 37.12 | 44.08 | 47.18 | 48.77 | 48.77 | 48.27 | 47.77 | 47.61 | 45.13 |
| **SEAMax** | 4.86 | | | | | | | | | | | | | | | | | | | | | | | |
| **SEACount** | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| **ENS** | 208 | | | | | | | | | | | | | | | | | | | | | | | |

| | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00(Next Day) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Combination 24** | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| **allocation =** | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 29.16 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 | 30.68 |
| **supplied load** | 29.36 | 29.44 | 29.33 | 29.41 | 29.36 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 30.96 | 30.92 | 30.85 | 30.85 | 30.92 | 30.93 | 30.92 | 31.85 | 30.97 |
| **total Demand** | 49.76 | 49.24 | 46.11 | 40.91 | 33.63 | 29.4 | 24.28 | 22.22 | 21.52 | 21.14 | 20.89 | 20.89 | 20.89 | 21.52 | 23.92 | 37.12 | 44.08 | 47.18 | 48.77 | 48.77 | 48.27 | 47.77 | 47.61 | 45.13 |
| **SEAMax** | 3.81 | | | | | | | | | | | | | | | | | | | | | | | |
| **SEACount** | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| **ENS** | 208.3 | | | | | | | | | | | | | | | | | | | | | | | |

Continued .

Legend

T = Number of time slots
N = Number of feeders

△A = Tolerance allowed in load shed amount

SEA = Served-load Excedes Allocation
= Total Served-load - Allocation in an hour

%SEA = ( SEA * 100 ) / Allocation

SEA Count = Number of time slots when SEA is Posipositive

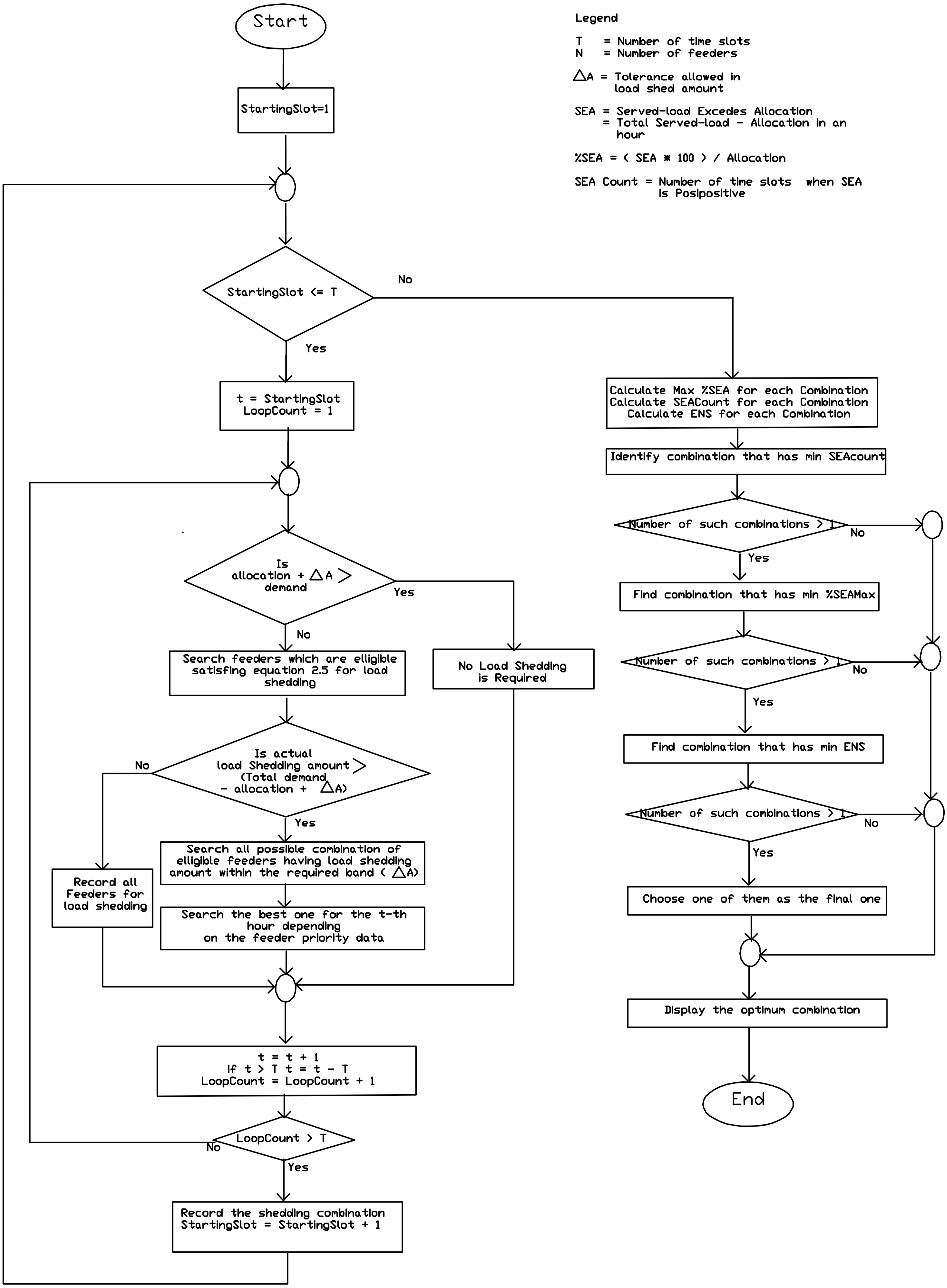


Figure 2.1: Flow Chart of the Proposed Algorithm

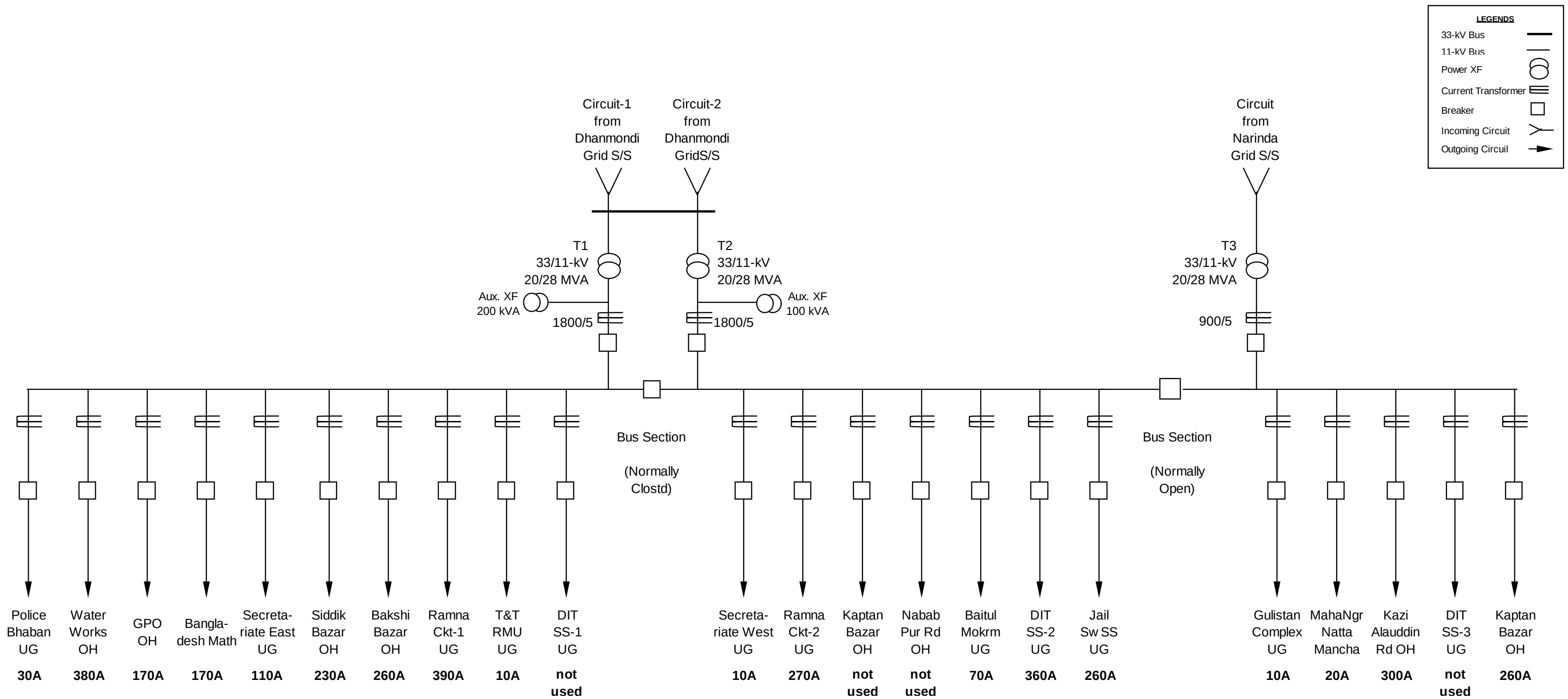


Figure3.1: Single Line Diagram of 33/11 kV SS at New Rmna (Near the Fulbari Shoe Market)