Algorithm for Cluster Overload:

Start:

primary_NF_count ← x
MAX_NF_count ← MAX_NFS

NF_y gets overloaded (usage>=80%) [2<= y <=x]

Step-1:

if ***primary_NF_count = MAX_NF_count***
    then return YES
else
    Go to Step-2.
end if

Step-2:

target_flow_id ← NULL

loop [for each flow in ***NF_y***]
    Determine the flow with the highest packet rate.
    Set ***target_flow_id*** ← ***flow_id***
end loop

Step-3:

loop [for each NF in the cluster except y]
    Find the NF with the lowest usage
    Set ***target_NF*** ← ***NF_ID***
end loop

Redirect flow with ***target_flow_id*** of ***NF_y*** to ***target_NF***

Step-4:

Calculate the expected usage of target NF if the target flow is redirected. Set the expected usage in a variable named ***expected_target_NF_usage.***

if ***expected_target_NF_usage<80%***
    then Redirect the target flow to the target_NF
        Return NO
else
    Create a new NF in the cluster.
    Redirect target flow to the new NF.
    primary_NF_count ← ***primary_NF_count + 1***
    Return NO
end if