



Turn the backup on when your accumulators are below 10%, and turn it off when it's above 90%. Use a simple memory cell. Connected to your accumulator: If electricity < 10: output green 1 If electricity > 90: output red 1 Connected to itself: If red ?? 1: output green input count Power switch: If green > 0: run backup power



the steam engines should only kick in as backup power when the main base is low even under extreme overload, the steam engines should not stall 2 comes from the number of times my base grows hugely without needing the backup power, then the first time I need it, it immediately overloads and completely stalls (the inserters driving the boilers)



Get accumulator level reading, connect steam when reading is below threshold. Problem: When using simple circuitry the steam power will go on and off very fast, because the steam will charge the accumulators over the threshold, resulting ???



# FACTORIO BACKUP STEAM POWER



The accumulators still have 10% in them, so your base will still have power while the steam engines are warming up again; and it only takes a few seconds for them to warm up. Also, I find power switches tricky to use because you need to separate your base into multiple separate power networks. I prefer to have just one global power network.



The usual solution for backup steam power in vanilla is to put the steam power plant in an isolated network and use a power switch to connect that network to the main network. You put an accumulator on the main network next to the power switch, and you use a circuit condition to connect the two networks when the accumulator runs low.



I usually turn my early game steam power into a backup system once I start doing nuclear power. It has saved me a few times when I mess something up. It doesn't provide enough power to run everything at full capacity but it doesn't turn into a complete brown out. This gives me enough time to run over to my nuclear build and fix things.



# FACTORIO BACKUP STEAM POWER



The power priorities will be: solar, normal accumulator, steam, emergency backup accumulator. I am new to Factorio. I have seen the pain, difficulty, and frustration in setting up an electric network that turns off the steam engines at night. The current power priorities are: solar, steam, accumulators. If someone wants to store steam power



There are various ways to achieve that. The most primitive setup would be a backup power plant (type doesn't matter) connected with a power switch to the rest of the grid, activated by circuit condition: just hook up a wire from an accumulator (charge is displayed as variable A) to the switch and set a threshold for activation (the value of A is the percentage of charge).



Solution: I wanted to have enable the steam power at a certain threshold and shut it off at another threshold. The current setup is just for example: At 70% and below charge, the steam power shall be connected. At 90% and up charge, ???



# FACTORIO BACKUP STEAM POWER



Hi, you are generally right. The most "pro" system I ever seen has very similar system of yours. The author just make it more smooth and set the pump condition differently (in range 70-80%, one or two to 70, one to 71 one to 72 etc).



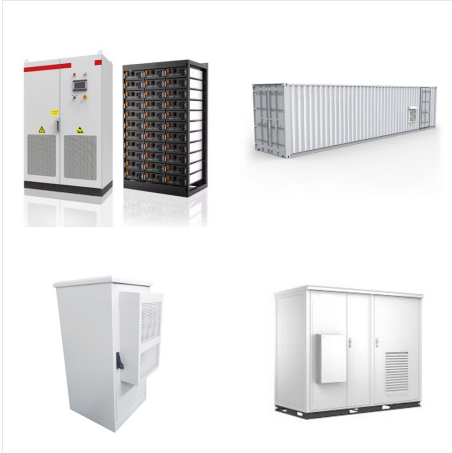
In case of power failure, fuel from the conveyor moves within its range and gets put into the boiler behind it, powering the single steam engine. 4.) This power line is powered **ONLY** by the single steam engine on the left, not by the main electrical system of the plant. This means that it is only powered when the system has detected a power outage.



Set the power switch to only be on if the signal is less than 10. Now, if the accumulator is less than 10% full, the power switch will connect the steam engines to the rest of your power grid. This will flicker back and forth rapidly but it will work. It will just look ugly if you look at your power statistics.



# FACTORIO BACKUP STEAM POWER



This circuit was designed to create a system that would connect an isolated power network that uses fuel (steam/nuclear) and connect it to the primary power network that relies on solar power if a certain condition is met. The only thing to add is a power grid to provide power to the combinators, but I wanted to leave this up to the player.



Once they go above the expected charge level, you want backup steam to stop. A separate power network with a single solar panel, a single accumulator (starting fully charged) and an artificial 42W load (e.g. 8 always-on lamps using circuit wire, and 2 combinators) should be able to infinitely alternate between 100% charge at sundown and 16%



You connect these to at most 6 steam turbine at 5.8 MW each ( $6 * 5.8 = 34.8$  MW) + some steam engine to take rest of the steam. When I connected this setup to 6+ steam turbine and my test factory power consumption went beyond 40 MW, it made the performance / power production drop.



# FACTORIO BACKUP STEAM POWER



- the minimum amount of steam that can be used to continue producing power between the moment the cell is inserted in the reactor and the moment the steam level stops falling (this value can be found by looking at how much steam dips under an arbitrary threshold value with the power plant running at 100%)



The usual steam backup power systems that I see usually have some efficiency problems. For example they kick in even though the charge left in the accumulators would be enough to last the night. So I decided to give it a shot myself. This powergraph is the result. As you can see from the flat power line of the beacons, there are no power outages.



I am a relatively new player (260h). My main world has been nuclear powered for the most part. Now trying to improve the power generation, I have remade the steam turbine setup for a max 2.4Gw, remade the Kovarex processing cell to fully automatic simple logistics only, and already made a pretty good water and steam backup storage.



# FACTORIO BACKUP STEAM POWER



Playing with my Power Grid (All the disruptions to Production) I wanted to Reduce my Steam Power Production (Amazing amount of pollution comes from this area) to the most negligible amount without using a Clock. With the help of a coding rule that dose not allow accumulators to charge each other and the distance power-lines join and provide power at i ???



My version of a smart steam power backup. With this section of the map I decided to prioritise having a complex circuit network over providing a larger power output. Hope you like the results! In my current game, I am powering the main base entirely on accumulators.



Actually, I think you can use a power switch linking the steam engines to your main network, which toggles based on current energy in an accumulator. Haven't tried it yet tho. Build power switch, and make sure main network and steam engines are segregated with it as the only attachmenet point. Attach a red wire from power switch to an accumulator.



# FACTORIO BACKUP STEAM POWER



How about this. Put solar pannel as a sensor, attach it to an accumulator to read charge value from and add a load that takes a bit less than solar pannel's output power. Connect your power switch wire wire to the accumulator, click on the latter, see which signal it outputs it's charge to and only enable the power switch when it's not zero.



Put a power switch on your steam, only turn it on if the accumulators are below some value, maybe 10%. To stop it flickering near the threshold, you can use an RS latch to enable when below maybe 20% and disable above 90% or whatever you like.



I have wire coming from one of the steam tanks to the inserters that put the fuel in. They are set to enable when water < 5000 so when the tanks start to get low they power up the plant and all four reactors go on and get their neighbor bonus.



# FACTORIO BACKUP STEAM POWER



I have enough solar now that I can shut off my steam engines, but I'm keeping them as a backup mainly in case biters attack and the lasers need more power. I had the idea of using a power switch and combinators, reading the level in an accumulator, but I'm having difficulty figuring out exactly how to connect it. Here's how I want it to work: 1. Power switch ???