

Power Grid: Clearer English Rules / Crib-sheet

Rio Grande Games's Power Grid is an awesome game, but the english translation of the rules and the layout of the rules makes it cognitively harder to play the game than necessary. Especially when you're trying to look up the rules whilst playing!

This document is an attempt to create a clearer guide to the rules to use during play.

Changes to translation/terminology

Whilst I've tried to stick to the original terminology, one chosen translation causes ongoing confusion. In the original rules, the choice of word "Step" (from the German word "Stufe") to mean the macro parts of the game is poorly chosen, as "step" typically means a small part. An alternative translation of "Stage" has been used in this document.

Setting up

Board

- Choose a side of the board to play on
- Choose which regions of the map to play on:
 - 2-3 players = 3 regions
 - 4 player = 4 regions
 - 5-6 players = 5 regions

Top-tip: use the black player markers to form a border of the out-of-bounds area and cover up the links to out-of-bounds cities. This makes it easier to remember the game area during play.

Players

Each player should have:

- A pack coloured wooden houses
- 50 Elektro
- Overview card

Start order

Draw lots to determine start order (note, order can be any sequence and doesn't need to be clockwise/anti-clockwise).

Use one of each players coloured houses to mark the play order in the top-left strip on the board

Top-tip: Don't be clever and skip this bit. The play order is determined at the start of each round and the conditions of the game can change such that you can't easily recalculate the play order.

Resource Market

The space at the bottom of the board is the Resource Market. The numbers are the price of each unit of resource.

The market is stocked from right to left - i.e. fill up the most expensive squares of each resource type first.

The starting stock levels are:

- Coal: 1 Elektro 8 Elektro [3x8 = 24 units]
- Oil: 3 Elektro 8 Elektro [3x5 = 15 units]
- Garbage: 7 Elektro 8 Elektro [3x2 = 6 units]
- Uranium: 14 Elektro 16 Elektro [2 units]

Power Plant Market

- Arrange the Power Plant card 03 10 in a 2x4 grid:
 - Top row: 03 04 05 06
 - Bottom row: 07 08 09 10
- Remove the "Stage 3" card and Power Plant 13 from the deck
- Shuffle the deck, place face down
- Remove & discard the following number of cards:
 - 2-3 players = 8 cards
 - 4 players = 4 cards
 - 5-6 players = 0 cards
- Place "Stage 3" card face down at bottom of deck
- Place Power Plant 13 card face down at top of deck

Playing the game

1.Determine player order, by:

- Largest number of city connections
- If a tie, highest numbered power plant

2. Auction power plants [in player order]

Each player, in player order:

- Picks a power plant from the top row to put up for auction *OR* passes
 - If they pass, they cannot partake in any further actions this round
- Starts the bidding. Minimum bid is the number of the card
 - Proceeding clockwise, each player can bid in turn. If you pass, you can't rejoin the bidding. Bidding can go multiple rounds.
 - · Highest bidder wins.
- Draw a replacement card from the draw stack and rearrange the market.
- If the starting player didn't win, they pick again
- The last player to pick will be unopposed, so can buy the plant of their choice at face value - the advantage of going last

Players can own up to 3 power plants (2-players: up to 4 power plants).

If buying an additional power plant, you must discard a power plant of your choice. You can move resources if you have storage space on another power plant of that fuel type.

3. Buy resources [in reverse order]

- Each power plant can store double the resources it needs to fire
- You can freely move resources between plants of the same type

4. Building [in reverse order]

- Number of players that can connect to each city = stage number. So in stage 1, only one player can connect to a given city, occupying the 10 Elektro spot. In stage 2, the 15 Elektro spot opens. And in stage 3, the 20 Elecktro spot opens.
- If you can't build on a city, you can still pass through it to connect to a further city paying all relevant connection costs
- You can connect to as many or as few cities as you want each go

5. Bureaucracy

5a. Burning resources

- Entirely optional you don't need to power up your plant and indeed it may be uneconomical to do so
- Mixed fuel plants can burn a mixed load
- You get paid out based on number of your connected cities you can power - see Overview Card

5b. Restock resources

 Quantities vary by number of players and stage of game. See Resource Supply Table

5c. Updating the power plant market

- Highest numbered power plant card gets returned to bottom of draw stack. Draw a replacement card.
- Remove any power plants with a number lower than the highest number of cities connected by any player. Draw replacement cards.
- Stage 3 only: Remove the smallest power plant and draw a replacement card
- Rearrange the market

Power Plant Auction Rules

Stage 1 & 2:

8 power plants are visible. The power plant market should always be kept in numbered order, with the lowest 4 cards in the top row. Only the top row is available for auction.

Stage 3:

6 power plants are in the market, all available for auction.

Stages

Number of players	Stage 1 -> 2 At the end the round in which any player connects	Stage 2 -> 3 Immediately when	End of game At the end of the building phase when any player connects
2	10 cities	When "Stage 3" power plant card is drawn	21 cities
3	7 cities		17 cities
4	7 cities		17 cities
5	7 cities		15 cities
6	6 cities		14 cities

What changes in each Stage?

- City connections: Number of players that can connect to each city = stage number. So in stage 1, only one player can connect to a given city, occupying the 10 Elektro spot. In stage 2, the 15 Elektro spot opens. And in stage 3, the 20 Elecktro spot opens.
- Resource restock levels change in each phase
- Power Plant Market: In stage 3, only 6 cards are shown at a time.
 All can be selected for auction

Special actions at stage transitions

First go:

- Every player must buy a power plant
- Players do not have to connect a city they can wait until later rounds
- Player order is recalculated after power plant buying phase

Stage 1->2: [specified number of cities connected by any player]

 Remove the lowest numbered power plant from the market and draw a replacement.

Stage 2->3: ["Stage 3" card drawn]

- Shuffle the draw stack
- If during the auction phase:
 - continue as normal (there will be 1 less power plant available)
- After the auction phase:
 - Remove the lowest numbered power plant from the market do not draw a replacement. There should now be 6 power plants visible in the market

End of game:

The bureaucracy at the end of the game works slightly differently:

- Players still need to power up their plants by burning resources, but instead of getting paid you just note the number of cities powered
- The player with the most powered cities wins
- If a tie, player with most remaining cash wins

Resource Supply Table

2 players			
	Stage 1	Stage 2	Stage 3
Coal	3	4	3
Oil	2	2	4
Garbage	1	2	3
Uranium	1	1	1

3 players			
	Stage 1	Stage 2	Stage 3
Coal	4	5	3
Oil	2	3	4
Garbage	1	2	3
Uranium	1	1	1

4 players			
	Stage 1	Stage 2	Stage 3
Coal	5	6	4
Oil	3	4	5
Garbage	2	3	4
Uranium	1	2	2

5 players			
	Stage 1	Stage 2	Stage 3
Coal	5	7	5
Oil	4	5	6
Garbage	3	3	5
Uranium	2	3	2

6 players			
	Stage 1	Stage 2	Stage 3
Coal	7	9	6
Oil	5	6	7
Garbage	3	5	6
Uranium	2	3	3