Power Grid

Updated with Rio Grande rules as of February 2009, particularly changes to Step 3 initiation.

Introduction

Goal: Power the most cities in the last round of the game.

Fuel:
- The 24 brown cubes are coal.
- The 24 black cylinders are oil.
- The 24 yellow octagonal pieces are garbage.
- The 12 small red octagonal pieces are uranium.

Power plant cards:
- The upper-left number is the lowest acceptable bid for the plant.
- The color of the bar at the bottom matches the fuel the plant requires, which is also pictured on the bar.
  * Plants with two-color bars (brown and black) accept either coal or oil in any combination.
- A power plant uses all the fuel units shown on the left to power up to the number of cities shown on the right.
  * Wind, solar, and fusion plants show no fuel on the left; they run essentially without fuel.
- Each power plant may store up to twice the fuel shown.
- Players may rearrange fuel on their power plant cards at any time.

Power plant market: The power plant market is always sorted by number and has two rows during Steps 1 and 2.
- Power plants in the cheaper row are available for auction. The more expensive plants are not yet available.
- Minimum Rule: Any time a power plant number in the market does not exceed the leader’s score (number of cities they have houses in), immediately remove the plant from the game and draw a new card for the market.

The game has three steps:
- Step 1.
  - Houses may only be placed in the “10” spaces in cities.
  - There are 8 plants in the market. The lowest 4 are available for auction.
- Step 2.
  - Houses may only be placed in the “10” or “15” spaces in cities.
  - There are 8 plants in the market. The lowest 4 are available for auction.
- Step 3.
  - Houses may be placed in the “10,” “15,” or “20” spaces in cities.
  - There are 6 plants in the market. All are available for auction.

Setup

Choose the US side or the Germany side of the board.
For 2/3/4/5/6 players, choose 3/3/4/5/5 contiguous areas to use, respectively, and block off the others.
Give each player 50 Elektros, a payment summary card, and all houses of one color.
Put one house of each player left of space 1 of the score track (decorated with skylines).
Put one house for each player in the player order area (marked by light bulbs) in random order.
Start the fuel supply:
- Put coal in the coal spaces in boxes 1 to 8.
- Put oil in the oil spaces in boxes 3 to 8.
- Put garbage in the garbage spaces in boxes 7 to 8.
- Put uranium in the uranium spaces in boxes 14 and 16.
Arrange the power plant cards:
- Sort the power plant cards numbered 03 to 10 in two rows of 4 near the board to form the power plant market.
- Put aside the Step 3 card and the number 13 power plant. (The summary cards should already be out of deck.)
- Shuffle the remaining cards and put them face down as a draw pile.
- With 2/3/4 players, remove 8/8/4 cards, respectively, from the draw pile and the game.
- Put the Step 3 card at the bottom of the draw pile and the 13 on the top.
Play (Do the following phases in order each round.)

Determine Player Order (skip in first round of game; player order is random for initial auctions)
Sort player order area by number of cities (leader has most) and secondarily by plant number (leader has highest).

Auction Power Plants (leading player first, continuing until no players remain to auction and bid)
The leading player of those left who have neither bought a plant this round nor passed putting a plant up for auction may put one of the available plants up for auction (and participate as a bidder):
- This player may pass (but not in the first round of the game) and is then out of all auctions this round.
- If they do not pass, they select a plant to auction and must bid the number on the card or greater.
  - In Step 1 or 2, the lowest 4 plants in the market are available. In Step 3, all 6 in the market are available.
- Bidding circles clockwise with each player bidding higher or passing until only one player remains.
- A player who passes bidding is out of this auction but can participate in later auctions this round.
- The final remaining player pays their bid to the bank, takes the power plant, and is out of all auctions this round.
After each auction, draw a new card and add it to the market, sorted by number. (Heed the Minimum Rule.)

Buy Resources (trailing player first)
Each player may buy, at the prices shown on the board, as many resources as they can afford and can store on their power plant cards (twice as many as pictured on each card).

Build (trailing player first)
Each player may build as many houses as they can afford. (Players are not required to build, even in the first round.)
- The cost for the player’s first house is the number in the space (usually 10) it is put in.
- The cost for each subsequent house is the number in the space if it is put plus the cost of connections along the cheapest path to any other house the player has. Some adjacent-city connections have no cost.
- No player may have two houses in the same city.

When a player builds a house: Immediately advance their house in the scoring track one space.
- Heed the Minimum Rule. If the Step 3 card is drawn, remove it and the lowest plant in the market from the game and do not draw replacements. Shuffle the draw pile. After finishing the build phase, the game is in Step 3.

After the build phase, with 2/3/5/6 players, respectively:
- If a player built their 10th/15th/10th/15th/10th house, remove the lowest plant in the market from the game and replace it from the draw pile. The game is now in Step 2. If the Step 3 card is drawn, start Step 3 as just above.
- If a player built their 21st/17th/17th/15th/14th house, the game ends, and the player who can supply the most cities per the rules below wins. (No final payment is made.) Ties are broken first by most money, then most houses.

Bureaucracy (leading player first)
Each player says how many cities they wish to supply with electricity and is paid according to the schedule below.
- They may supply as many cities as they have on the board and have power plant capacity for, including fuel.
- Each operated power plant consumes all the fuel shown on its card, even if it does not power all the cities shown.
- Consumed fuel is returned to the bank. Unoperated plants consume no fuel.

<table>
<thead>
<tr>
<th>Cities</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>19</th>
<th>20+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elektros</td>
<td>10</td>
<td>22</td>
<td>33</td>
<td>44</td>
<td>54</td>
<td>64</td>
<td>73</td>
<td>82</td>
<td>90</td>
<td>98</td>
<td>105</td>
<td>118</td>
<td>124</td>
<td>129</td>
<td>134</td>
<td>138</td>
<td>142</td>
<td>145</td>
<td>148</td>
<td>150</td>
<td></td>
</tr>
</tbody>
</table>

The bank replenishes the resource market (if it can), filling the most expensive open spaces first, using this table:

<table>
<thead>
<tr>
<th>Coal</th>
<th>Oil</th>
<th>Garbage</th>
<th>Uranium</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 2 1</td>
<td>4 2 1</td>
<td>3 2 1</td>
<td>5 2 1</td>
</tr>
<tr>
<td>3 2 1</td>
<td>4 2 1</td>
<td>3 2 1</td>
<td>5 2 1</td>
</tr>
<tr>
<td>3 2 1</td>
<td>4 2 1</td>
<td>3 2 1</td>
<td>5 2 1</td>
</tr>
</tbody>
</table>

In Step 3, remove the lowest plant in the market from the game and draw a replacement. (Heed the Minimum Rule.)
In Step 1 or Step 2, put the highest power plant in the market face down under the draw pile and draw a replacement.
- If the Step 3 card is drawn, remove it and the lowest power plant in the market from the game and do not draw replacements. Shuffle the draw pile. The game is now in Step 3.