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| **Problem Chosen** B | **2024HSB MCM/ICM Summary Sheet** | **Team Number** 1111111 |

**Your Paper's Title**

**Summary**

21世纪以来，面对着碳减排和能源危机的双重挑战，利用清洁能源取代传统能源发电已成为一种必然趋势。建立以可再生能源为核心的电力结构体系是实现碳达峰和碳中和战略目标的必由之路。本文综合考虑中国实际情况，建立模型对中国未来电力供应量、清洁能源最大发电潜力进行研究，分析了各地区建设光伏电站的可行性，同时对未来中国碳达峰和碳中和战略目标的实现进行了预测，为国家电力结构转变提供参考。

针对问题一，建立 Spearman相关性分析和LSTM预测模型。首先，结合影响电力供应的各种因素，使用 Spearman相关性分析模型分析得出各因素与电力供应量之间的相关性；接着，在此基础上建立了LSTM预测模型，对中国2024年到2060年电力供应的发展趋势进行了有效预测。结果显示，从2024年到2026年中国电力供应大致呈S型曲线增长，到2060年，中国的年电力供应量将达到19万亿千瓦时。

针对问题二，建立TOPSIS综合评估模型对在某区域建设光伏电站的可行性进行评估。本研究以中国2019年数据为例，参考中国各省光伏电厂建设成本、年GDP总和、非耕地面积和年太阳辐射量数据，对各省建设光伏电站的可行性综合得分进行排序。并以综合得分排名第一的新疆为例，分析在此建设光伏电站的优缺点进行了详细分析。

针对问题三，建立粒子群优化算法模型对中国光伏发电的最大潜力进行估算。首先，结合中国地理特点将中国分为四个地区；接着，结合每个地区地理和经济等因素，建立粒子群优化算法分别估算出各地区光伏发电的最大潜力；最后，将四个地区光伏发电的最大潜力加和得出中国光伏发电的最大潜力为74.5万亿度。

针对问题四，利用问题一建立的LSTM模型对未来中国碳达峰和碳中和战略目标的实现进行了预测。查阅相关研究结论，到2060年，非化石能源消费比重达到80%以上，中国碳中和目标得以实现。本研究用中国2021年以前清洁能源年发电量和全国年总电力供应量数据，预测得到2060年中国清洁能源年发电量和全国年总电力供应量，并计算得到2060年清洁能源年发电量在全国年总电力供应量中占比，得出结果为78%，根据模型预测，若未来加强投资力度与政策帮扶，基本可以达到碳中和目标。

针对问题五，结合前四个问题的研究成果，致信中国政府，简述研究成果，并向中国政府提供未来能源结构转型及其发展的施策建议。

**Keywords:** keyword1; keyword2; keyword3; keyword4

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# Introduction

## Problem Background

中国电力行业的构成涉及多元化的能源产出，包括但不限于传统能源和可再生能源。这些不同的发电方式对于应对中国庞大的电力需求具有决定性的作用。电力作为经济发展和社会进步的基石，在工业生产、农业、商业服务及家庭生活等多个领域中扮演着核心角色。

随着中国经济的持续增长和民众生活水平的提升，国家对电力的需求呈上升趋势。与此同时，面对碳达峰和碳中和目标，中国迫切需要调整其电力结构。为实现双赢，用清洁能源替代传统能源发电已成为必然趋势。而光伏发电作为一种创新的可再生能源，其有望成为可再生能源领域的重要支柱，进一步推动中国乃至全球的绿色能源转型。然而，光伏发电领域仍面临挑战，例如发电效率有待提高，且不同地区、季节和时间的发电能力差异显著。此外，光伏模块的成本效益、稳定性和可靠性方面还需改进。

基于上述分析，进行对未来的发电量预测，以及对可再生能源在中国的建设潜力和能源的总体上限进行预测是至关重要的。本文和相应的模型旨在提供一个框架，用于深入理解和量化中国电力行业的未来发展潜力和提供各项数据。此外，通过对未来电力需求和供应的精准预测，不仅可以为能源政策制定提供科学依据，还能为相关技术和市场的发展提供指导。因此，本文和模型的研究对于促进中国乃至全球的可持续能源发展具有重要意义。

## Restatement of the Problem

**问题1：**对中国电力供应体系的多因素互动机制进行系统性分析，并基于此构建一个预测模型，以估计2024至2060年间中国电力供应的发展趋势。

**问题2：**综合考虑成本、收益、地理和照明条件等因素，讨论研究在特定地区建造光伏发电厂的可行性。

**问题3：**从中国的地理资源和投资能力、成本和收入因素进行分析，研究中国的最大光伏发电量。

**问题4：**对中国光伏发电可持续发展的战略规划进行研究，预测估计在本世纪60年代前清洁能源替代燃煤发电从而达到碳中和的可行性。

**问题5：**根据上述研究成果，撰写一封正式的信函，致中国政府相关部门。概述上述研究发现，并为政策制定者提供基于科学研究的见解和建议。

## Literature Review

在当今世界能源与环境问题日益严重的形势下，利用清洁能源取代传统能源发电一直是可再生能源领域的重要研究方向。自21世纪初光伏技术商业化以来，研究人员开发了各种模型来评估光伏电站的潜在电力产出和经济效益。例如，多参数生命周期成本分析模型被广泛用于评估不同光照条件下的光伏项目。然而，很多模型聚焦在特定区域或假设条件下，无法全面评估不同地理和气候条件下的光伏电站潜力。随着气候模型和地理信息系统（GIS）的发展，研究者们逐渐意识到光伏发电潜力可以在不同的地理和气候条件下进行详细区分[1]。这也为全面评估一个区域的光伏发电潜力提供了新的视角。以往的研究表明，通过结合太阳辐射数据和地形分析，可以较为准确地预测特定区域的最大光伏发电量[2]。在考虑成本效益的情况下，主要采用综合成本效益分析模型。此外，还有考虑环境影响的三参数光伏项目评估模型的研究[3]。

## Our Work

问题是在中国致力于实现碳达峰和碳中和战略目标的背景下，对利用清洁能源电力结构转型方面的研究。

**问题一：**

第一小问提出了“中国的电力供应与许多因素相互作用”，并要求探究这些因素与电力供应之间的关系。这首先需要查阅相关文献资料并确定影响中国电力供应的因素。对于探究相关关系之类的问题，可以考虑相关系数模型，并且各因素是定序变量，故可以考虑使用 Spearman相关性分析。

第二小问要求预测从2024年到2060年中国电力供应的发展趋势。属于预测类问题。结合上面的因素作为指标，本题使用了长短时记忆网络（LSTM）模型进行预测。

**问题二：**问题提出了“需要考虑成本和收益，以及地理和照明条件”，这要求从成本、收益、地理和照明条件等方面进行分析。对于可行性评估，可以考虑综合评估模型。

**问题三：**问题提出了“结合中国的地理资源和投资能力、成本和收入因素”，这要求从地理资源、投资能力、成本和收入等方面进行分析。问题是求中国光伏发电的最大潜力，即结合上面的因素，求光伏发电量最大值，可以变换为一个规划类问题，构建目标函数，找到约束条件，即可求得最大潜力。

**问题四：**问题是能否实现用清洁能源替代燃煤发电，实现中国碳达峰和碳中和战略目标。首先，清洁能源包括太阳能、风能等多种能源，这里要用这些能源发电量总和。其次，要查阅相关文献了解达到碳中和对能源供给行业的要求：清洁能源年发电量占比达到80%。可通过预测出2060年清洁能源年发电量和全国年总电力供应量，并计算出所占的比重，即可评判能否达到与其标准。

**问题五：**问题要求给中国政府写一封信。我们将从模型结果阐述及建议提出等多方面进行书写。同时，由于此信收件人为中国政府，故要求行文有较高的专业性，且给出的数据严谨真实，提出的建议合理客观。

# Assumptions and Justifications

**假设一：政治与地缘政治环境的稳定性**

本假设依据中国在过去数十年所展现的政治稳定性及其国际关系的连续性。政治稳定性被认为是长期能源战略和基础设施投资的基本前提，特别是在光伏发电等长期性项目中尤为重要。鉴于中国政治体制的稳固性以及历史上较为有限的政治波动，此假设具有较高的可信度。

**假设二：自然灾害的影响受限且未来全球气候总体无较大变化**

尽管自然灾害的发生具有不可预测性，但根据历史数据，中国重大自然灾害的频率较低且影响可控。进一步地，随着现代化水平的提高和应急管理能力的增强，对基础设施的损害及其影响可以被最小化。因此，假定在预测期内自然灾害对电力系统的影响极为有限是有理据的。此外目前全球气候总体平稳，故假设未来全球气候总体无较大改变也是较为稳妥的。

**假设三：全国电网互联且无隔离区域**

中国在近年来电网建设和升级方面的投资体现了其建立全国性互联网电网系统的决心。此假设基于中国政府和电力公司的持续努力及现存的全国性电网架构。据此，认为中国电网能实现全国范围内的高效电力传输是合理的。

**假设四：政策支持与市场因素的协同**

鉴于中国政府对可再生能源，特别是光伏发电的长期承诺以及已实施的政策支持，这一假设具有坚实的实际基础。市场因素，如电力需求的增长和价格政策，也支持光伏发电作为能源结构的一个重要组成部分的合理性。

**假设五：电网容量保持充裕与整合问题的解决**

随着电力需求的增加和能源结构的转变，电网的现代化和扩容成为必然趋势。中国在电网技术和管理方面的持续投资以及其在全球电力工程领域的领先地位表明，这一假设是基于现实且具有前瞻性的。

# Notations

The key mathematical notations used in this paper are listed in Table 1.

Table 1: Notations used in this paper

|  |  |
| --- | --- |
| **Symbol** | **Description** |
|  | Spearman's rank correlation coefficient |
|  | Spearman rank correlation analysis for each pair of data rank difference |
| n | The total number of observed samples in the Spearman correlation coefficient |
| t | t-value for testing the significance of Spearman's rank correlation coefficient |
|  | Critical value at significance level a/2 in the t-distribution with n-2 degrees of freedom |
|  | Hidden state at time t in LSTM model |
|  | Cell state at time t in LSTM model |
|  | Output gate state at time t in LSTM model |
|  | Input at time t in LSTM model |
| W,U,b | Parameters in LSTM model |
|  | Activation function |
| ⊙ | Hadamard product (element-wise multiplication) |
|  | Element of the normalized decision matrix in TOPSIS method |
|  | Element of the weighted normalized matrix in TOPSIS method |
|  | Attribute value in the positive ideal solution in TOPSIS method |
|  | Attribute value in the negative ideal solution in TOPSIS method |
|  | The distance from the evaluation index to the positive ideal solution |
|  | The distance from the evaluation index to the negative ideal solution |
|  | Composite score in TOPSIS method |
| W | Maximum potential power generation |
| SA | Solar panel construction area |
| C | The construction cost of solar panels per square meter |
| GDP | Gross Domestic Product |
|  | The maximum buildable area of solar panels |

# TASK 1：基于斯皮尔曼系数与LSTM的中国电力供应预测研究

## Data Description

我们从中国国家统计局获取了历年来的一系列的相关参数（2003年-2021年），包括电力可供量(亿千瓦时)、人口总量（万人）、GDP（现价美元）、能源转换效率、每天电力消费量(亿千瓦小时)、焦炭能源消费总量(万吨)、总用电量（万亿千瓦时）、总装机容量(KW)、主要部门电气化率、非化石能源比重等。

## 模型建立

**4.2.1 斯皮尔曼相关系数模型的建立**

斯皮尔曼等级相关系数（Spearman's rank correlation coefficient），记作 ，是一种非参数统计量，用于量化两个变量等级之间的单调关联性。其计算公式为：

|  |  |
| --- | --- |
|  | () |

当使用斯皮尔曼等级相关系数进行统计分析时，如果样本量n > 20，可以认为样本量足够大，使得 的分布接近正态分布。这允许使用t分布来检验两个变量是否存在统计学上的显著相关。

检验的t值计算公式如下：

|  |  |
| --- | --- |
|  | () |

从中得到的 \( t \) 值与 \( t \) 分布的临界值进行比较，以确定相关性的显著性。如果：

|  |  |
| --- | --- |
|  | () |

则拒绝原假设，认为两变量间存在显著相关。否则如果：

|  |  |
| --- | --- |
|  | () |

则不拒绝原假设，认为两变量间不存在显著相关。这里a是预设的显著性水平（如 0.05），而  是在n - 2自由度下，t 分布表中对应的临界值。

在此题中使用SPSSPro软件并采用斯皮尔曼相关系数法，对收集到的数据进行了相关性分析。在得到的结果中，每一对变量的相关系数（rho值）和统计显著性（p值）都被细致地计算和报告。这些数据不仅揭示了变量之间的相关强度，还提供了这些相关性的统计显著性。通过这种方法，可以更准确地量化和解释各种因素对中国电力供应发展的影响。

**4.2.2 长短时记忆网络（LSTM）模型建立**

长短时记忆网络（LSTM）是一种强大的深度学习模型，特别设计于解决传统循环神经网络（RNN）中的长期依赖问题。LSTM引入了门控结构，包括遗忘门、输入门、输出门等，以有效地管理记忆细胞的信息流动。这种机制使得LSTM能够更好地捕捉长序列中的模式，同时有效地防止梯度消失和梯度爆炸问题，使其在自然语言处理、时间序列分析等任务中取得卓越表现。

LSTMs的核心部分如图1所示，被称为memory block，主要包含了三个门（forget gate、input gate、output gate）与一个cell。方框内上方的那条水平线，被称为cell state，可以控制信息传递给下一时刻。

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AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA////APv7/AD6+fsAAAD/AAAAAQAAAAAAAAAAAAAAAAAAAAAA+/v8APr5+gAHCAcAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP///wD7+vsA+/r8AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAPr5+wD8CPwABQYFAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEA//7+AP///wABAQEAAAAAAAAAAAABAAAA////APf4+AD/AAAAAQAAAP7//wD/AAAAAQICAAMCAgAAAAAAAAAAAP///wACAgEAAwMDAP///wABAAAAAAAAAAAAAAD///8A/f7+AAAAAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAQDACIkHgAkJyIAR01BACImHwABAQEA////AAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP///wD9/f0A+/v8AAQDAwAEBQQAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD///8AAAAAAP/+/wD+//4A////AP/+AAD///8AAAD/AAAAAAAAAAAA/wAAAP38/QD///8AAAAAAAAAAAAAAAAAAAAAAP39/AD08/UACv//AAkJCAD///8A//8AAAIBAQAAAAAAAQEBAAYGBgD5+/sA9Pb2AAYGBQAGBQUAAQEBAP///wACAgIAAP8AAAD//wAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA////APz8/AACAQEAAgICAPz8/AD///8AAP8AAPv7+wD9/f4ACAgIAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD/AAD//wAAAAAAAAEBAAD//wAA/Pz8APLx9AALCwoABgcFAAEBAQD+/f4AAQABAAQDAwABAQEAAQEBAPX39wAGBQUA/Pz8APj5+QAPDAwAAAAAAAMCAwAAAAAA/f3+AAICAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD+/v4Aurq6AKysrADS0tIAAQEBAOzs7ABcXFwAHR0dAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP///wD///8AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEBAQABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAD///8A5+fnAKampgDIyMgA8vLyAAEBAQAAAAAAGxsbAHx8fAAiIiIAAAAAAAAAAAD5+fkA5OTkABoaGgAAAAAAAAAAAAAAAAAAAAAAAgICAAkJCQD8/PwA9/f3AAAAAAD8/PwA5ubmACEhIQAFBQUA9/f3AAAAAAD+/v4A0NDQACQkJAAMDAwAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA+fn5AOHh4QAPDw8Au7u7AN7e3gDt7e0ASUlJAElJSQADAwMAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA////APv7+wDMzMwAw8PDAOnp6QBCQkIAAQEBANPT0wD8/PwAXl5eAB0dHQABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD19fUA4+PjABEREQCXl5cA7+/vAEVFRQBFRUUAAwMDAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAUFBQA+fn5APLy8gAYGBgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP///wD6+PkA/v3+AAEBAQAAAAAAAAAAAAAAAAAAAAAAAQEBAP///wD49/kABQYFAAICAgABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP///wD+/v4A+Pj5AP///wABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAD+/v4A+fn6AAQEBAAAAgAAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAUDAPr6/AADAwMAAgICAAAAAAD/AAAA/f39AAABAQD///8ACQcHAPz9/QD6/PwAAAAAAAEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD///8A/f7+APr7+wAGCQYAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD/AAEABgcGABUYFAAHCAcA/f39AOjm6gAYGhcAAwMCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP///wD///8A/v7/AAAAAAD7+/wABAUEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD///8A/Pv8APv7/AD8+/wA/Pz8AP7+/gD//wAAAAAAAAAA/wAAAAAAAAAAAAAAAQD///8AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEA/v7/APXz9gABAAEABQYEAAAAAAABAQEAAAAAAAAAAAABAQEABAMDAPj6+QAHBQUAAQEBAAAAAAABAQEAAQAAAAAAAAD/AP8AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD+/v4AAwUEAAAAAAD+/v8AAQAAAAABAAD8+vwAAQEBAAAA/wD//wAAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD/AAAAAAD/AAAAAAAAAAAAAQEAAAD/AAD8+vwA9f/1AAAACgAGBwYA/f3+AAMCAgABAQEAAQEBAAYFBQD4+voA9vj4AP3+/gAGBQUAAwMDAAEBAQACAgAAAQEBAP79/QAABQQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAgICADIyMgDt7e0A2traAFxcXAAwMDAAFRUVAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADy8vIAy8vLAPv7+wAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAQEBABMTEwAqKioACgoKAAEBAQAAAAAAAAAAAAAAAAD///8A5ubmAI2NjQDOzs4ACAgIANTU1AAODg4ALCwsAA8PDwAGBgYAAAAAAAAAAAAAAAAA+/v7AO/v7wAmJiYAAQEBAAAAAAAAAAAAAAAAAAICAgAICAgA/v7+APj4Zd/0ZQAAIABJREFU+AAAAAAA7+/vAPX19QAeHh4AAQEBAPf39wD///8A8fHxAOnp6QA0NDQAAQEBAAAAAAAAAAAAAAAAAAAAAAD///8A////AAAAAAABAQEAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAPn5+QDn5+cA7OzsABEREQBra2sAtbW1ALCwsABBQUEACwsLAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADk5OQA5OTkAFZWVgDNzc0Ao6OjAE9PTwAwMDAAjIyMADs7OwAdHR0AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA7+/vAOTk5AAtLS0AWVlZAOjo6ACbm5sAKSkpAB8fHwAAAAAAAAAAAAAAAAD///8A/v7+AAICAgABAQEAAAAAAAAAAAAAAAAADg4OAP39/QD19fUAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD8/P0A+vv8AAAAAAAAAAAAAAAAAP///wAAAAAAAQEBAAAAAAABAQEA/Pz8APv7/AAHBwYAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA+/r8APv6/AABAQEAAAAAAAAAAAD///8AAAAAAAEBAQABAQEAAAAAAPr6+wAHB/0ABQYEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAQEBAAUFBQD8/PwA+Pr5AAkHCAABAQEABAICAPf5+QAGBQUAAQEBAPb4+AAAAAAAAgEBAAD//wABAQEAAAAAAAAAAAABAgIAAQEBAAEBAQAAAQEAAAAAAAEBAQAAAAAA/v39APj6+gABBAIAAwUEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA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gABAQEACwkJAAQEBAAAAAAABgUFAAEBAQABAAAA////APz9/QAEBwQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAQEBAAMDAQAAAAAAAAAAAAAAAAD/AAAAAAAAAP38/QABBQEAAAAAAPr5+gD49/gA/v7/AAEBAQD//wAAAQEBAAMDAgADBAMAAgICAAEAAQABAgAAAAEAAAD/AAD/AAAA//7/APr5+gD+/v8AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABQYEAAUFBAD+//4AAAAAAP///wD7/PwA+/z9AA8LCwD7/PwA+Pr5AAgHBwACAgIA////AP3+/wAGAwIAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD5+fkA7u7uACUlJQADAwMAAAAAAAAAAAD9/f0A7OzsABUVFQAGBgYAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA9fX1ANjY2AD8/PwAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAQEBAAICAgAAcHBwAAAAAAAAAAAAAAAAD4+PgA5+fnAB4eHgAGBgYAAAAAAAAAAADg4OAAFBQUAA0NDQAAAAAAAAAAAAAAAAAAAAAAAAAAAAMDAwADAwMA/Pz8AAAAAAAAAAAAAAAAAAAAAAAAAAAABwcHAAQEBADo6OgAHR0dABQUFAAAAAAABwcHAAQEBADy8vIA6enpACwsLAAFBQUAAAAAAAAAAAAAAAAAAAAAAAAAAAD29vYA9vb2ABcXFwAJCQkAAQEBAAAAAAAAAAAABgYGAHp6egD9/f0AFRUVAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP7+/gDo6OgADAwMAA0NDQAAAAAA7+/vAOnp6QA4ODgAAwMDAAAAAAAAAAAA6+vrAAYGBgAPDw8AAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACAgIAFxcXAAoKCgACAgIAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD4+PgA6urqACAgIAAGBgYAAAAAAAAAAAAAAAAAAAAAAPLy8gD7+/sAERERAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAALCwsAYWFhAAAAAAAAAAAAAAAAAN/f3wAHBwcAWlpaABoaGgAAAAAAAAAAAAICAgAEBAQAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA+Pj4APb29gAaGhoABAQEAP///wDh4eEACwsLABoaGgACAgIAAAAAAAAAAADo6OgAFBQUAA8PDwAGBgYAAQEBAAAAAAAAAAAAAAAAAPz8/AACAgIABQUFAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEBAQABAQAAAAABAP8CAQADAAMAAAAAAAL6AQD4+PkA//8AAAUHBQAGBgUAAAAAAAAAAAAAAAAAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA0y+aZgAAIABJREFUAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA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QEACQoIACIlIAAAAAAAAAAAAAAAAAABAQEAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAQEBAAAAAAA/Pz8AP7+/wABAAEAAwMDAAMDAwABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEBAAAGBgYAAwoDAAUFBAAAAAAAAAAAAAAAAAABAQAAAwMCAP//AQADAwMAAAAAAAAAAAAAAAAAAgICAAoLCgD6BPoA9PT3APz7+QACAgEADhANAAUFBAACAgIAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA/wD/AP3+/QD//v8AAAEBAAUFBQACAgIAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD/AP8A/wAAAAEBAAAGBwYACwwJAAQEBAABAQEAAAAAAAAAAAAAAAAAAQEBAAEDAQAICQgA9vb3AP/4/wAHBgYABAMDAAAAAAD8/fwA+Pn5APz//gAJCwkAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA////AOvr6wAPDw8ADw8PAAEBAQAAAAAA////ANvb2wAYGBgADAwMAP7+/gADAwMAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEBAQAsLCwA////AM7OzgAICAgAYmJiAB4eHgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAgICACQkJACurq4A9vb2AAwMDAAAAAAAAAAAAAAAAAANDQ0ATk5OAC4uLgABAQEAAAAAAAAAAAAEBAQAQEBAAC4uLgAEBAQAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAA////AOfn5wAUFBQABgYGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADw8PAGVlZQAnJycAAQEBAAEBAQA3NzcA8fHxAAICAgAzMzMAAgICAPj4+ADy8vIAGBgYAAAAAAD+/v4AExMTAFRUVADy8vIAAAAAAAAAAAAAAAAAAAAAAP///wANDQ0ACQkJAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABwcHAGNjYwApKSkAERERAP///wAAAAAAAAAAABsbGwBjY2MA6enpAD8/PwAJCQkAvb29AOvr6wBCQkIACAgIAAAAAAD+/v4A5+fnADs7OwAEBAQA/v7+AAICAgABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAQEAQEBAAPz8/ADa2toAUlJSADMzMwADAwMAAAAAAAAAAAD///8A7+/vAP7+/gASEhIAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAA6+vrABkZGQAKCgoAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD9/v0A/wD/AAYHBgABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA/v7+APr5+wAICQcAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD///8AAP8AAPz7/AD09PUA/Pz8AAoLCQADAwMAAAAAAAAAAAAAAAAA+/v8AAMBAgAFAwMA/Pz8AP///wAFBQUA/v7+APz8/AAEBAQABwUGAPf6+QD9/fwAAQEEAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP///wD+/v4A/f3+AP///wADAwIAAwMDAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD/AP8A+vr5APn4/wAJCgkABwgGAAEBAQABAQEAAAAAAAAAAAAAAAAA/Pv8APz6/AAKBwcABAMEAAABAQABAAAAAwICAAUFBAD5+foA+ff5AAcJBwACAgIAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA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AAAAAAAAAAAAAAAAOrq6gD6+voAOzs7AOnp6QDv7+8ACwsLACwsLABTU1MAJycnAAAAAAD///8A+vr6AAEBAQAFBQUAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD///8A6OjoAPr6+gBPT08AKCgoAOnp6QDi4uIA2NjYACAgIAABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAcHBwAFBQUA5+fnAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD//v8A//8AAAAAAAAA/wAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEBAQAAAAAAAAEAAAEBAAAAAAAAAQAAAAIBAQACAgIAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAPz8/ADv7+8AAwMDAA4ODgD8/PwAAgICAAUFBQABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD6+foA+/v7AP///wABAQEAAAAAAAAAAAAAAAAAAQEBAP///wD5+PkACAkHAAQEBAABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD///8A+vn7APr5+wAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP8A+vn6APsHBgAGBwYAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADAgMALDEpAMLIywAmHx8ADAoKAAAAAAABAQEA+/v7APn7+wDS2toA8/j4AF5PTwC+yMgA9/j4AP///wAFBQUAAwMDAAEAAAAAAQEA/v//AAQEBAAFBQUAAQEBAAECAgD//v4AAAAAAP///wDn7OwA3OrlAElLLQD///8AAAAAAAEAAQABAAEAAAAAAAAAAAAA/wAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD+/v4AysrKANXV1QBZWVkACQkJAAAAAAD9/f0A7u7uAPDw8AD9/f0A2traAMPDwwBZWVkADw8PAAAAAAAAAAAAAAAAAAAAAAABAQEAHx8fAB0dHQD///8AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADAwMAAAAAAAAAAAAAAAAAAAAAAP7+/gDKysoA4ODgAGVlZQAkJCQA/v7+ACEhIQDNzc0ADg4OAAoKCgABAQEAAAAAAAAAAAAAAAAA9PT0AAcHBwADAwMAAAAAAAAAAAAAAAAAAAAAAA0NDQACAgIA9fX1AN/f3wAHBwcAGxsbAOLi4gAEBAQA8PDwANjY2AAUFBQAFxcXAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA6+vrAPLy8gBVVVUADAwMAPz8/ADW1tYAFxcXAAwMDAAAAAAA////ANnZ2QDFxcUAUlJSABMTEwAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP///wD8/PwA2dnZAMzMzAC2trYAYGBgABgYGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAREREAODg4AAoKCgDu7u4A9/f3AC4uLgAeHh4AYWFhAAQEBAAAAAAA/Pz8AK2trQAYGBgAPz8/AAICAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAD///8A8PDwALu7uwDg4OAAAAAAAAAAAADq6uoA0tLSAAAAAAAHBwcAAAAAAAMDAwAtLS0APDw8AAkJCQABAQEAAAAAAGUQBq0AACAASURBVAAAAAAAAAAAAAAAAAAAAAAAAAAA////ANfX1wAXFxcAJSUlAAICAgDw8PAA7OzsAPb29gD///8AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEBAQACgoKAPX19QAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAP///wDy8fMAzcnRAPn3+AD//f4A2tbcAOzqNAAWGBUAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADV1dUAm5ubAAICAgBBQUEA////ADMzMwAeHh4AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA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wMAAQEBAAAAAAABAQEAAQEBAPr7+wD6/PsABwkHAAECAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAKS0lAPn3+gAICggA8/HzAKadrQDd2uAAEhQRAGNtWwBFS0AAFxkVAAkKCAAEBQQAAQEBAAEBAQAAAAAAAAAAAAAAAAAAAAAABwgGAAkJCAAAAAAAAAAAAAAAAAAGBwYAOT40AFJaTAA5PjUAEhURAP/9/gDOztgALSYmACQeHgBkVVUAHhkZAAAAAABjU1MACgkJAPv8/ADQ29oACxcOABASEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA/wAAAP//AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA9fT1APf29wAICQgAERIRAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADo5+oAurO/ADE3LgA1OjIAAgICAOPg5ADo5usABgYFAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA//8AAP7//wAAAAAAAwMDAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAgICAAACAAABAQEAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAQEAAQEBAAIDAgABAQEAAAEAAAMDAgACAgIAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABISEgB0dHQAn5+fAIODgwAVFRUABgYGADw8PAA2NjYABAQEAAAAAAAAAAAA39/fADs7OwAFBQUAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA7u7uAAcHBwAQEBAAAAAAAAAAAADu7u4A+vr6ABUVFQD+/v4AAgICAAEBAQAAAAAAAAAAAAAAAAAAAAAAAAAAADQ0NAD9/f0ABQUFAAAAAAAAAAAAAAAAAAAAAAAAAAAAAQEBACUlJQBycnIAnJycANXV1QASEhIACwsLAENDQwAtLS0ABAQEAAAAAAD5+fkA7OzsABwcHAAAAAAA////APPz8wDg4OAA/v7+AAAAAAAAAAAAAAAAAAAAAAAMDAwAKCgoAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAVFRUAPj4+AM/PzwBCQkIAExMTAAAAAADb29sALCwsAAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEhISAFZWVgAHBwcAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABwcHAGJiYgCgoKAAkJCQABoaGgADAwMALCwsAERERAALCwsAAAAAAAAAAADe3t4AFRUVAAoKCgD///8AAQEBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA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图1.(a)cell state (b)forget gate (c) input gate (d) output gate

公式如下：

|  |  |
| --- | --- |
|  | () |
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LSTM第一步是用来决定什么信息可以通过cell state。这个决定由“forget gate”层通过sigmoid来控制，它会根据上一时刻的输出通过或部分通过如图1(b)所示模型和公式。第二步是产生我们需要更新的新信息。这一步包含两部分，第一个是一个“input gate”层通过sigmoid来决定哪些值用来更新，第二个是一个tanh层用来生成新的候选值相加，得到了候选值如图1(c)所示模型和公式。最后一步是决定模型的输出，首先是通过sigmoid层来得到一个初始输出，然后使用tanh将值缩放到-1到1间，再与sigmoid得到的输出逐对相乘，从而得到模型的输出，如图1(d)所示。

在本模型以中国近年来的电力消耗数据以及其他相关因数作为模型输入。本预测选用LSTM网络作为预测工具，并基于其在处理具时间序列依赖性数据方面的优越性做出结果。模型的输出为2024至2060年的电力供应预测值，并提供了大致的变化趋势。

## The Solution of the Model

**4.3.1 电力供应与关键影响因素的相关性结果**

对于中国的电力供应与相关影响因素之间的关系的研究，采用Spearman相关系数对各相关指标进行分析，得出各指标与中国电力供应量之间的相关性。同时本研究基于此结果对其之间的关系进行了分析。

研究使用SPSSPro工具进行数据处理和相关性分析。初步结果表明这些因素与中国电力供应的趋势之间存在显著相关性。得到的热力图如下：

表格

描述已自动生成

图2：斯皮尔曼相关性分析所示热力图

Table 2: 热力图中横纵坐标含义

|  |  |
| --- | --- |
| Symbol | 对应的含义 |
| Y | 可供应电力量 |
| X1 | 人口总量（万人） |
| X2 | GDP(现价美元) |
| X3 | 能源转换效率 |
| X4 | 每天电力消耗量（亿千瓦） |
| X5 | 焦炭能源消费总量（万吨） |
| X6 | 总用电量（万亿千瓦时） |
| X7 | 总装机量 |
| X8 | 社会主要部门电气化率 |
| X9 | 非化石能源比重 |

在这张图中，可供应电力量与人口总量、GDP、能源转换效率、每天电力消耗量、焦炭能源消费总量以及总用电量之间存在显著的正相关性。然而，总装机量和社会主要部门电气化率以及非化石能源比重与可供应电力量之间的相关性较弱，表明这些变量不是决定可供应电力量的主导因素。总体来看，除了总装机量和社会主要部门电气化率以及非化石能源比重之外，本题所研究的其他所有特征对于解释中国电力供应量的变化都具有重要的统计学意义。

**4.3.2 中国电力需求的预测结果**

根据LSTM原理，对2024-2060年的用电量进行预测。预测结果如下所示：

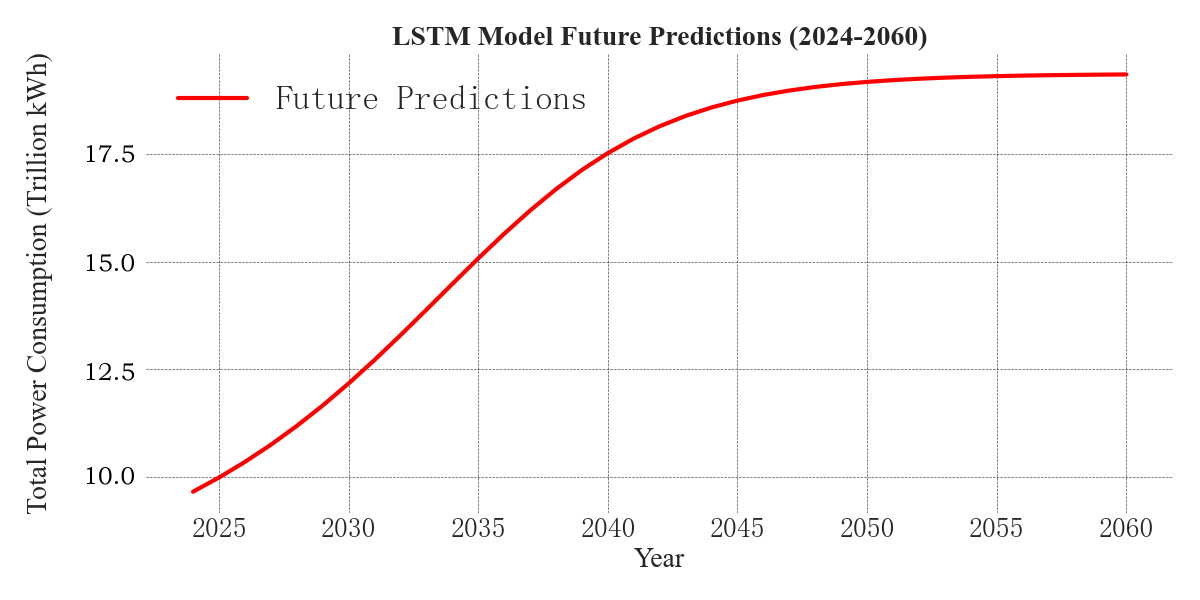


图3. 模型预测曲线

在图3图表所示的长短期记忆（LSTM）模型预测中，我们预测出截至2060年中国的年电力供应量将达到18万亿千瓦时。另外，所得到的统计评价指标为均方误差（MSE）2,271,098.32，均方根误差（RMSE）1,507.02，和平均绝对误差（MAE）1,168.76，这些指标反映了模型在训练过程中的优良表现。特别是决定系数（R^2）达到了0.9967，表明模型预测值与实际数据间存在极强的相关性，并能够解释大部分的变量波动，从而证实了模型在电力消耗量预测上的有效性和准确性。

该图表描绘了2024至2060年期间中国电力消耗量的预测增长趋势，其中红色曲线清晰地表明了随时间递增的电力需求。预测结果对于电力行业的规划和政策制定具有实质性的指导意义。

# TASK 2：基于TOPSIS方法的光伏发电站选址优化模型

## 数据收集

我们从国家统计局上获取了各个地区的一系列的相关参数，包括年平均太阳辐射量（千瓦时/平方米/年）、当地运营成本（元/千瓦时/年）、非耕地面积（平方公里）、用电量（亿千瓦时）、一平方米太阳能板建设价格（人民币）等等。

## 数据预处理

在使用数据进行TOPSIS综合评估前，需要对数据进行预处理。将数据规范化，确保它们在相同的度量尺度上。决策问题的关键是多个备选方案和多个决策准则。决策矩阵表示了每个备选方案在每个准则下的得分情况。为了确保准则之间的可比性，必须对原始数据进行规范化。公式如下:

|  |  |
| --- | --- |
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## 模型建立

（1）引入权重向量，以反映各个决策准则的相对重要性。设由熵权法确定的各属性的权重向量为W=[,,…,]T,构成的加权规范阵为C=(Cij)mxn，

则

|  |  |
| --- | --- |
|  | () |

（2）确定正理想解和负理想解。确定正理想解C\*和负理想解Co。设正理想解C\*的第j个属性值为cj\*,负理想解C0第j个属性值为为C0j，有：

正理想解:

|  |  |
| --- | --- |
|  | () |

负理想解:

|  |  |
| --- | --- |
|  | () |

（3）分别计算备选方案与正理想解和负理想解之间的欧几里得距离，以此量化备选方案与理想解之间的差异程度。公式如下：

备选方案到正理想解的距离为：

|  |  |
| --- | --- |
|  | () |

备选方案到负理想解的距离为：

|  |  |
| --- | --- |
|  | () |

（4）得到综合的评分。计算各方案的排队指标值(即综合评价指数)。

|  |  |
| --- | --- |
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（5）用综合得分被用来对备选方案进行排序，从而确定最优的方案。

## 模型求解与综合评估

结合中国各省份相关数据，利用TOPSIS综合评估模型得到各省份建设光伏电站可行性的综合得分及其排名，结果如下。

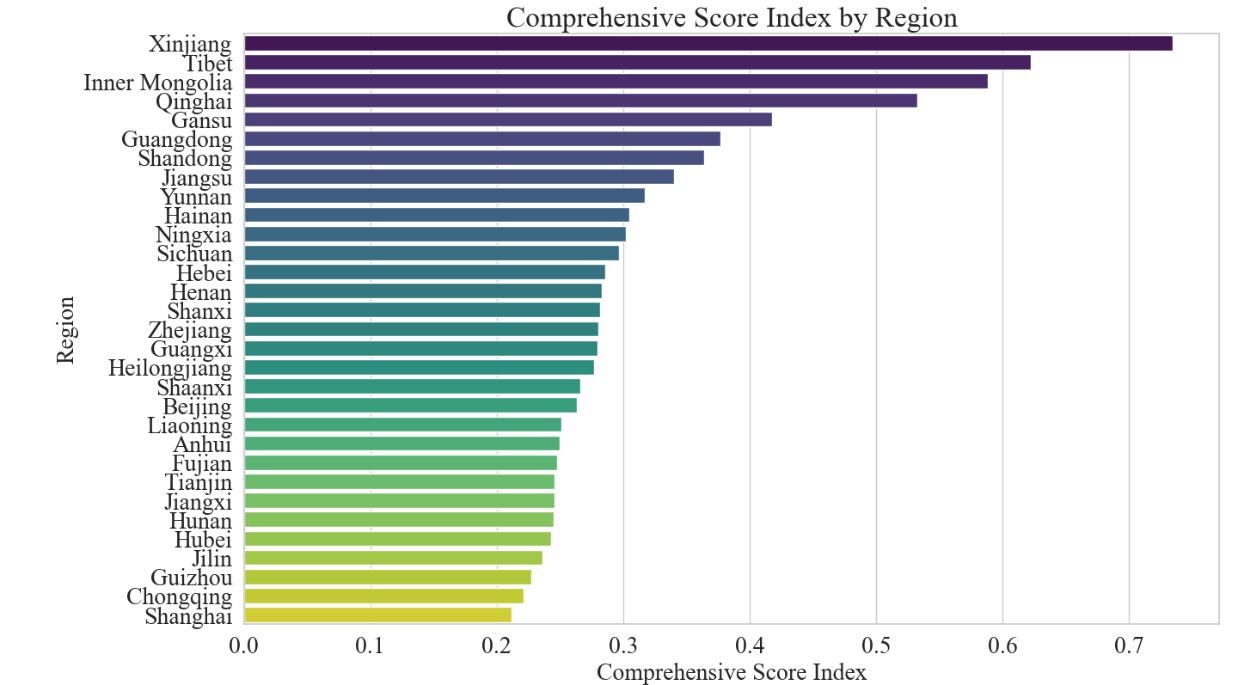


图4.各地区在建设光伏发电厂的可行性上排序

根据图4，在基于TOPSIS算法生成的热力图中，新疆以0.73的综合得分位居首位，相较于得分最低的上海（0.21），新疆的综合得分高出0.52，这一显著差异揭示了新疆在光伏发电潜力方面的绝对优势。此外，当考虑到年平均太阳辐射量、土地成本、基础设施以及光伏板成本等因素时，新疆与其他省份的得分差异进一步显现出地理和经济条件的异质性。

例如，新疆的年平均太阳辐射量为1732千瓦时/平方米/年，显著高于全国平均水平；结合其广阔的非耕地面积，可以推断其土地可用性较高，而成本相对较低。新疆的土地成本为每平方米25元人民币，远低于沿海发达地区的30~40元人民币/平方米，这一差异便直接影响了光伏发电厂的成本效益分析。但同时，本模型注意到基础设施和交通的评分可能反映了新疆对光伏板运输和维护的便利程度不高，但相较于其他对于光伏发电的巨大优势，本模型的计算结果反映交通及基础设施建设等劣势仍不足以抵消其他项目所带来的巨大优势。

在考虑这些因素的基础上，新疆的光伏发电厂建设前景相较于其他地区显然更为明朗。因此，结合图4与相关参数可以得出结论，新疆在中国各省份中，光伏发电厂选址方面具有最佳的综合条件，这将为光伏产业投资者和决策者提供了有力的数据支持。

# TASK 3:中国光伏发电量潜力评估模型

## 数据收集

本研究为评估中国光伏发电的最大潜力，综合利用了来自中国国家统计局、世界银行及中国气象站的数据。并统计整理了包括太阳能资源、地理信息、投资能力、及光伏投资占比、成本和GDP等各项指标。

为简化模型的同时最大化体现地区各项指标差异且保留各地区地域特征，本研究基于中国各地区的经济及地理环境将中国分为北方、南方、青藏及西北四个主要地区进行计算。具体地区划分表见附录

## 模型建立

在本研究应用了粒子群算法来探索中国光伏发电的最大潜力。本研究的核心在于利用精细化的数据分析来优化太阳能资源的利用。在这个框架下，我们特别关注了以下六个关键维度：太阳能板建设面积、年平均太阳辐射量、每平方米太阳能板的成本、全国各省份的总GDP值。

在模型的构建过程中，我们首先定义了一个目标函数。数学表达为：

|  |  |
| --- | --- |
|  | () |

其中，W代表最大可能的发电量，S为每10兆瓦太阳能板装机容量所需土地面积，取值为10.989hm2。

首先，考虑到投资能力的限制，我们引入了成本约束，即太阳能板建设的总成本不得超过该区域在光伏发电建设方面的总投资。查阅文献得知中国在光伏发电建设方面的平均投资约占总GDP的0.3%。[n]：

|  |  |
| --- | --- |
|  | () |

此外，太阳能板建设面积不能超过可用于建设太阳能板的最大面积，即

|  |  |
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|  | () |
|  | () |

## 模型求解

~~在本研究中，通过粒子群算法，我们对中国各主要地区的光伏发电潜力进行了深入分析和预测。模型预测显示，北方地区、南方地区、西北地区和青藏地区的最大发电量预测值分别为12.2万亿度电、17.8万亿度电、32.0万亿度电和12.5万亿度电。由此计算出在全国层面上，所能实现的总最大发电量预计为74.5万亿度电。（画一个表格表示更清晰）~~

# TASK 4中国清洁能源发展模型及预测

## 数据收集

这里本研究使用数据均来自国家能源局与国家统计局。具体使用数据为清洁能源发电量，其中包括风力发电，水力发电，光伏发电和核能发电。查阅相关研究结论，到2060年，非化石能源消费比重达到80%以上，中国碳中和目标得以实现。

## 模型建立

基于此问题，本研究从计算2060年非化石能源消费比重入手。本研究结合2021年之前每年清洁能源年发电量和全国年总用电量数据，分别预测2060年清洁能源年发电量和全国年总电力供应量，并计算清洁能源年发电量在全国年总用电量中所占比例，得到的结果和80%进行比较，即可评判能否达到与其标准。

由于本问题属于预测类问题，并且和问题一第二问相似，所以本题可以使用问题一的LSTM模型进行求解。

## 模型求解

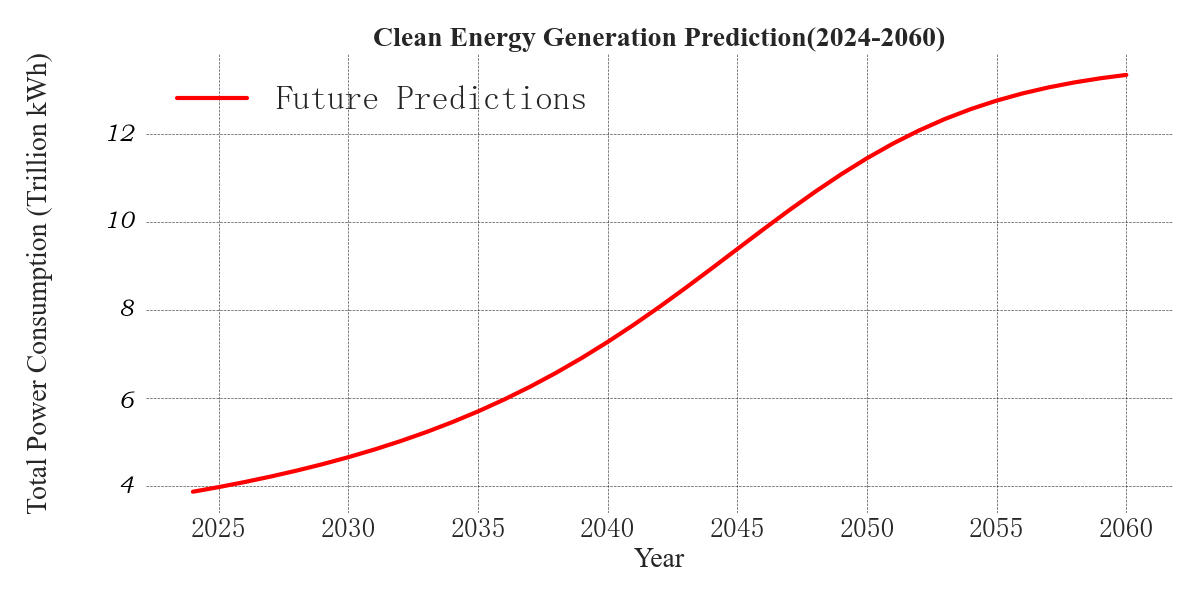


图5.清洁能源预测曲线图

如图n与图m所示，基于长短期记忆网络（LSTM）模型的预测结果分别体现了中国从2024年至2060年的全国年总电力供应量及清洁能源年发电量发展趋势。图n展示了全国年总电力供应量逐年增长，预测数值从2024年的略超10万亿千瓦时增至2060年的近18万亿千瓦时，揭示了中国未来几十年内能源需求的显著增长趋势。图m则聚焦于清洁能源的发展，预测结果显示从2024年的不足5万亿千瓦时增加到2060年的超过13万亿千瓦时，表明清洁能源年发电量占总能源产量的比重将会提升。计算得到2060年清洁能源年发电量在全国年总电力供应量中占比约为78%。

综合两幅图的信息，清洁能源年发电量增长十分迅速，预计到2060年在全国年总电力供应量中占比十分接近80%，相信在国家政策的大力支持下，中国一定能在2060年实现碳中和的战略目标。

# A Letter to the Chinese Government

|  |
| --- |
| Dear Chinese Government,  On behalf of our research team, I extend sincere congratulations to the Chinese government for its significant achievements in advancing national power supply and ecological civilization construction. China has demonstrated profound global influence and advanced governance capabilities in addressing climate change, promoting energy structure transformation, and fostering sustainable development.  Our research findings not only provide important references for the Chinese government in formulating energy and environmental policies but also offer robust support for the long-term planning of national development. Our study aims to provide a comprehensive and systematic model for power supply and clean energy development. This model encompasses forecasts for power supply and the potential assessment of photovoltaic power generation, taking into account the nation's carbon neutrality goals, thus offering a more complete and multidimensional decision-making reference for policymakers.  Based on current data, we have conducted an in-depth study of the future trends in China's power supply, paying special attention to its significant contributions and future prospects in achieving national ecological civilization construction and green development strategies. We predict that by 2060, China's power supply will exceed 17 trillion kilowatt-hours. This achievement not only highlights the tremendous progress of China's power industry but also marks China's leadership role in global energy transition. Our estimates, tailored to China's specific circumstances, suggest that the maximum potential of China's photovoltaic power generation could reach approximately 74.5 trillion kilowatt-hours. These figures will provide strong support in global environmental governance and energy structure transformation, presenting "Chinese wisdom, Chinese solutions, and Chinese strength."  According to our analysis, by 2026, the proportion of clean energy in China's power structure is expected to reach 75%, a remarkable progress. However, challenges remain in achieving the ambitious goal of carbon neutrality. To further promote low-carbon development, we suggest strengthening innovation-driven approaches, deepening adjustments to the energy structure, and encouraging the widespread application of green and low-carbon technologies to achieve carbon neutrality.  We firmly believe that under the strong guidance and relentless efforts of the Chinese government, China will play a leading role in global environmental protection and sustainable development. Our research team will continue to monitor China's progress in this crucial transition and is eager to offer ongoing intellectual support and technical assistance towards achieving this grand goal.  We look forward to further collaboration with you in this important field.  Sincerely,  [Research Team] [Date] |

# Model Evaluation and Further Discussion

## Strengths

1. **高度准确的预测模型：**根据论文中的数据，LSTM模型在预测中国电力供应量方面表现出色，模型预测的决定系数（R²）达到了0.9967，这表明模型预测值与实际数据间存在极强的相关性。此外，均方误差（MSE）、均方根误差（RMSE）和平均绝对误差（MAE）分别为2,271,098.32、1,507.02、1,168.76，这些指标均显示了模型在训练过程中的高度准确性。
2. **~~综合性的方法论：~~**~~论文中采用的多种方法论，如斯皮尔曼相关系数、LSTM、TOPSIS方法和粒子群算法，共同构成了一个强大的分析框架。例如，斯皮尔曼系数揭示了电力供应与关键因素之间的显著相关性，而TOPSIS方法在光伏发电站选址优化中的应用，显示了其在综合多方面因素进行决策时的有效性。~~
3. **~~复杂数据处理能力：~~**~~论文中的LSTM模型能够处理和解释复杂的时间序列数据，这在预测具有多变因素影响的电力供应量时尤为重要。例如，模型能够基于历史数据分析出电力需求的趋势，并预测未来的变化。~~
4. **~~加一点~~**

## Weaknesses

1. **数据时效性问题：**论文主要依赖于2003年至2021年的数据，缺乏2002年以前和2023年的数据，可能导致模型未能充分考虑近期的经济、社会和技术变化。这种数据的时效性问题可能会影响模型预测的准确性和适用性。
2. **片区内部差异性未充分考虑：**在问题三中，我们将中国划分为四个片区进行分析，部分数据采用了每个片区的数据平均值。这种方法掩盖了区域内部的差异性，未能充分捕捉每个片区内部在地理、经济和技术方面的差异，可能影响模型在细粒度层面的准确性和实用性。
3. **模型泛化能力的局限：**虽然LSTM模型在本研究中表现出色，但其对于训练数据以外的场景可能缺乏泛化能力。特别是在数据缺失或未包括某些关键变量的情况下，模型的预测准确度可能受到影响。

## Further Discussion

**9.3.1 模型改进**

1. **引入更细致的区域划分和数据：**为了更准确地捕捉每个片区内部的差异性，应考虑采用更细致的区域划分，并收集具体到各小区域的详细数据。这包括不同区域的经济发展水平、能源需求、技术进步和环境特征等数据。
2. **数据完整性和时效性提升：**针对数据缺失的问题，通过引入更全面和最新的数据集来改进模型，模型可以更贴近当前的能源供需状况。
3. **增强模型泛化能力：**通过引入机器学习的交叉验证技术和正则化方法，可以提高模型对于新数据的适应能力和泛化性能。此外，考虑到能源数据的复杂性，可以尝试融合多种预测模型，如集成学习方法，来提高预测的准确性和鲁棒性。

**9.3.2 模型拓展**

1. **结合地理信息系统（GIS）：**在模型中融入地理信息系统，以提供更精确的区域性能源分析。这对于光伏发电站选址和电网规划尤为重要，能够提供更具体的地理和环境因素考量。
2. **考虑政策和经济因素：**将模型与经济和政策分析相结合，考虑政策变化、市场动态和经济条件对能源供需的影响，这将使模型更具实用性。

# Conclusion

本文针对21世纪以来中国面临的碳减排挑战和能源危机问题，通过建立和应用一系列模型，对中国未来电力供应、清洁能源发展潜力、光伏电站的建设可行性以及碳达峰和碳中和目标的实现可能性进行了深入研究。研究成果可为中国电力结构转变和可再生能源的利用提供有力的科学支撑，对国家能源战略的政策制定具有重要的指导意义。

1. **电力供应预测**：结合斯皮尔曼相关性分析和LSTM预测模型，本研究发现中国电力供应量与经济发展、人口增长、能源转换效率等因素存在显著的正相关性。预测结果显示，到2060年，中国的年电力供应量将达到18万亿千瓦时，反映出中国电力需求的持续增长和电力结构的逐步优化。
2. **光伏电站建设可行性**：采用TOPSIS综合评估模型，本研究全面评估了在中国不同省份建设光伏电站的可行性，结果表明新疆地区因其优越的地理和气候条件，成为光伏发电的理想选址。这一发现对于指导光伏发电厂的地理分布和优化能源结构具有重要价值。
3. **光伏发电潜力评估**：利用粒子群优化算法模型，本研究对中国光伏发电的最大潜力进行了量化估算。结果表明，中国光伏发电的最大潜力高达74.5万亿度，体现了清洁能源在中国能源结构中的巨大潜力和发展空间。
4. **碳中和目标实现的预测**：基于LSTM模型的预测表明，到2060年，中国清洁能源年发电量在全国年总用电量中的占比将达到78%，接近于碳中和目标所要求的80%。这一发现表明，中国在碳中和方面已取得显著进展，但仍需进一步强化政策支持和投资力度，以确保最终目标的实现。

研究结果不仅为中国能源政策的制定和执行提供了科学依据，也为其他国家在能源转型和碳减排方面提供了参考。

# References

[1]徐伟,刘振领.内蒙古光伏开发空间适宜性及减排效益研究[J/OL].干旱区地理,1-13[2024-01-20]http://kns.cnki.net/kcms/detail/65.1103.X.20240104.1653.003.html.

[2].中国石化年均发电量最大单体分布式光伏项目并网发电[J].乙烯工业,2023,35(03):39.

[3]李智华,马浩强,吴春华,汪飞,俞薛颖.基于三参数的光伏组件老化程度诊断[J].中国电机工程学报,2022,42(9):3327-3337

# Appendices

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| Appendix 1 |
| Introduce: 这里放上附录1的介绍 |
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| --- |
| Appendix 2 |
| Introduce: 这里放上附录2的介绍 |
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本部分是附录部分，美赛对于附录不是特别看重，今年还限制了论文的页数（从第二页开始编号，不能超过25页）。

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在不超过页数限制的条件下，附录中可以包括下面内容：

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* 自己在网上找到的数据；
* 比较大的流程图；
* 较繁杂的图表或计算结果。