Risk Factors Comparison 2024-02-28 to 2023-02-23 Form: 10-K

Legend: **New Text** ~~Removed Text~~ Unchanged Text Moved Text Section

NRG' s risk factors are grouped into the following categories: (i) Risks Related to the ~~Proposed~~ Acquisition of Vivint **Smart Home** ; (ii) Risks Related to the Operation of NRG' s Business; (iii) Risks Related to Governmental Regulation and Laws; **and** (iv) Risks Related to Economic and Financial Market Conditions, and the Company' s Indebtedness ~~; and (v) Risks Related to Public Health Threats~~ . **The** ~~If completed, the~~ acquisition of Vivint **Smart Home** may not achieve its intended results **and its integration may disrupt or have a negative impact on** ~~. The Company entered into the Purchase Agreement with the expectation that the acquisition would result in various benefits, including, among other~~ -- **the** ~~things,~~ **Company' s business. Achieving the anticipated** cost savings and operating efficiencies **from** ~~. Achieving the anticipated benefits of~~ the acquisition **of Vivint Smart Home** is subject to **risks** ~~a number of uncertainties~~ , including whether the businesses of NRG and Vivint **Smart Home** are integrated in an efficient and effective manner. **These risks include, but are not limited to: • the difficulty of managing and integrating Vivint Smart Home and its operations; • difficulties in implementing and maintaining uniform processes, systems, standards, controls, procedures, practices, policies and compensation standards; • unanticipated issues in integrating information technology, communications, and other systems; • the possibility of faulty assumptions underlying expectations regarding the integration process; • the potential difficulty in managing an increased number of locations and employees; • difficulty addressing any possible differences in corporate cultures and management philosophies; and • the effect of any government regulations which relate to the business acquired. Many of these factors are outside of the Company' s control.** Failure to ~~achieve~~ **address** these ~~anticipated benefits~~ **risks effectively** could result in increased costs, lower- than- expected revenues or income generated by the combined company and diversion of management' s time and energy and could have an adverse effect on the Company' s business, financial results and prospects. ~~The Company will be subject to business uncertainties and contractual restrictions while the acquisition of Vivint is pending that could adversely affect its financial results. Uncertainty about the effects of the acquisition of Vivint on employees, customers and suppliers may have an adverse effect on NRG' s business. Although the Company intends to take steps designed to reduce any adverse effects, these uncertainties may impair its ability to attract, retain and motivate key personnel until the acquisition is completed and for a period of time thereafter, and could cause customers, suppliers and others to seek to change existing business relationships. Employee retention and recruitment may be particularly challenging prior to the completion of the acquisition, as employees and prospective employees may experience uncertainty about their future roles with the combined company. If, despite the Company' s retention and recruiting efforts, key employees depart or fail to accept employment with NRG because of issues relating to the uncertainty and difficulty of integration or a desire not to remain with the combined company, the Company' s financial results could be affected. The pursuit of the acquisition and the preparation for the integration of NRG and Vivint may place a significant burden on management and internal resources. The diversion of management attention away from ongoing business concerns and any difficulties encountered in the transition and integration process could affect the Company' s business, results of operations and financial condition. In addition, the Company has agreed not to take any actions that would materially delay the satisfaction of any of the closing conditions to the transaction or prevent any of those conditions from being satisfied. This restriction on the Company' s actions may prevent it from pursuing otherwise attractive business opportunities or making other changes to its business prior to the completion of the acquisition or termination of the merger agreement.~~ NRG' s financial performance may be impacted by price fluctuations in the retail and wholesale power and natural gas markets, as well as fluctuations in coal and oil markets and other market factors that are beyond the Company' s control. Market prices for power, capacity, ancillary services, natural gas, coal ~~and~~ **,** oil **and renewable energy credits** are unpredictable and tend to fluctuate substantially. Electric power generally must be produced concurrently with its use. As a result, power prices are subject to significant volatility due to supply and demand imbalances, especially in the day- ahead and spot markets. Long and short- term power and gas prices may also fluctuate substantially due to other factors outside of the Company' s control, including: • changes in generation capacity in the Company' s markets, including the addition of new supplies of power as a result of the development of new plants, expansion of existing plants, the continued operation of uneconomic power plants due to state subsidies, retirement of existing plants or addition of new transmission capacity; • ~~environmental regulations and legislation; •~~ electric supply disruptions, including plant outages and transmission disruptions; • changes in power and gas transmission infrastructure; • ~~fuel price volatility and~~ transportation capacity constraints or inefficiencies ~~; • changes in law, including judicial decisions~~ ; • weather conditions, including extreme weather conditions and seasonal fluctuations, including the effects of climate change; • changes in commodity prices and the supply of commodities, including but not limited to natural gas, coal and oil; • changes in the demand for power or gas, or in patterns of power or gas usage, including the potential development of demand- side management tools and practices, distributed generation, and more efficient end- use technologies; • development of new fuels, new technologies and new forms of competition for the production of power; • economic and political conditions; • **changes in law, including judicial decisions, environmental regulations and environmental legislation; and •** federal, state and provincial power regulations and legislation, and regulations and actions of the ISO and RTOs ~~; • changes in prices related to RECs; and • changes in capacity prices and capacity markets~~ . While retail rates are generally designed to allow retail sellers of electricity and natural gas to pass through price fluctuations and other changes to costs, the Company may not be able to pass through all such changes to customers. For example, serving retail power customers in ISOs that have a capacity market exposes the Company to the risk that capacity costs can change and may not be recoverable, or the Company may engage in sales of power at fixed prices. Additionally, increases in wholesale costs to retail customers may cause additional customer defaults or increased customer attrition, or may be impacted by regulatory rules. Further, in low natural gas price environments, natural gas can be the more cost- competitive fuel compared to coal for generating electricity. The Company enters into guaranteed supply contracts to provide for the amount of coal needed to operate its base load coal- fired generating facilities. The Company may experience periods where it holds excess amounts of coal if fuel pricing results in the Company reducing or idling coal- fired generating facilities. In addition, the Company may incur costs to terminate supply contracts for coal in excess of its generating requirements. Such factors and the associated fluctuations in power prices have affected the Company' s wholesale and retail profitability in the past and are expected to continue to do so in the future. Volatile power and gas supply costs and demand for power and gas could adversely affect the financial performance of NRG' s retail operations. **The** ~~NRG' s retail power operations purchase a significant portion of their supply from third parties. All of the gas sold by the Company in retail and wholesale markets is purchased from third parties. As a result, financial performance depends on the ability to obtain adequate supplies of power and gas from third parties at prices below the prices NRG charges its customers. Consequently, the~~ Company' s earnings and cash flows could be adversely affected in any period in which the wholesale power or gas prices rise at a greater rate than the rates the Company can charge to customers. The price of wholesale electricity and gas supply purchases associated with the retail operations' energy commitments can be different than that reflected in the rates charged to customers due to, among other factors: • varying supply procurement contracts used and the timing of entering into related contracts; • subsequent changes in the overall price of natural gas; • daily, monthly or seasonal fluctuations in the price of natural gas relative to the 12- month forward prices; • transmission and transportation constraints and the Company' s ability to move power or gas to its customers; and • changes in market heat rate (i. e., the relationship between power and natural gas prices). The Company' s earnings and cash flows could also be adversely affected in any period in which its customers' actual usage of electricity or gas significantly varies from the forecasted usage, which could occur due to, among other factors, weather events, changes in usage patterns, competition and economic conditions. ~~Substantially all of~~ NRG' s ~~businesses~~ **trading** ~~operates~~ **operations and use of hedging** ~~, wholly or partially, without long- term power sale~~ agreements ~~.~~ ~~Many~~ **could result in financial losses that negatively impact its results** of **operations, and** NRG **' s hedging activities may increase the volatility in the Company' s quarterly and annual financial results. The Company typically enters into hedging agreements, including contracts to purchase or sell commodities at future dates and at fixed prices, to manage the commodity price risks inherent in its business. The Company** ' s **risk management policies** ~~retail customers are contracted for a period of one year or less,~~ and **hedging procedures** ~~NRG may or~~ may not **mitigate risk as planned, and the Company may fail to fully or effectively** hedge its ~~retail~~ **commodity supply and price risk. In addition, these activities, although intended to mitigate price volatility, expose the Company to other risks. When the Company sells or buys** power ~~sales~~ **or gas forward, it gives up the opportunity to buy or sell at the future price, which not only may result in lost opportunity costs but also may require the Company to post significant amounts of cash collateral or other credit support to its counterparties. The Company also relies on counterparty performance under its hedging agreements and is** ~~exposure~~ -- **exposed to the credit quality of its counterparties under those agreements. Further** , ~~or may hedge~~ **if the values of the financial contracts change** in a manner that ~~is~~ **the Company does** not **anticipate,** ~~effective at managing quantity~~ or **if a counterparty fails to perform under a contract, it could harm the Company' s business, operating results or financial position. NRG does not typically hedge the entire exposure of its operations against commodity** price **volatility** ~~risk in the retail market~~ . ~~In addition~~ **To the extent it does not hedge against commodity price volatility** , **the Company' s results of operations and financial position** ~~many~~ - **may** ~~of~~ **be improved or diminished based upon movement in commodity prices.** NRG ~~'~~ **may engage in trading activities, including the trading of power, natural gas, fuel, emissions allowances, environmental attributes and credits, weather, and other physical and financial commodity related products that are not directly related to the operation of the Company'** s generation facilities ~~are exposed to~~ **or the management of related risks. These trading activities take place in volatile** ~~market~~ **markets and some of these trades could be characterized as speculative. This trading activity may expose the Company to the** risk ~~because they operate as" merchant" facilities without long- term power sales agreements for some or all~~ of **significant financial** ~~their generating capacity and output. Without the benefit of long- term power sales or purchase agreements, and without long- term load obligations, NRG cannot be sure that it will be able to sell or purchase power at commercially attractive rates or that its generation facilities will be able to operate profitably. This could lead to future impairments of the Company' s property, plants and equipment, the closing of certain of its facilities or the loss~~ **losses** ~~of retail customers,~~ which could have a material adverse effect on **its business and** ~~the Company' s results of operations,~~ financial condition **. NRG generally attempts to balance its fixed- price physical and financial purchases and sales commitments in terms of contract volumes and the timing of performance and delivery obligations through the use of financial and physical derivative contracts. These derivatives are accounted** ~~or~~ **for in accordance with the FASB ASC 815, Derivatives and Hedging (" ASC 815"), which requires the Company to record all derivatives on the balance sheet at fair value with changes in the fair value resulting from fluctuations in the underlying commodity prices immediately recognized in earnings, unless the derivative qualifies for** cash ~~flows~~ - **flow hedge accounting treatment or a scope exception. As a result, the Company' s quarterly and annual results are subject to significant fluctuations caused by changes in market prices** . Competition may have a material adverse effect on NRG' s results of operations, cash flows and the market value of its assets. ~~NRG has numerous competitors in all aspects of its business, and additional competitors may enter the industry.~~ The Company' s retail operations ~~specifically~~ face competition for customers. Competitors may offer different products, lower prices, and other incentives which may attract customers away from the Company. In some retail electricity markets, the principal competitor may be the incumbent utility. The incumbent utility **often** has the advantage of long- standing relationships with its customers and strong brand recognition. Furthermore, NRG may face competition from other energy service providers, other energy industry participants, or nationally branded providers of consumer products and services, who **have, and** may **in the future,** develop businesses **and offerings** that ~~will~~ compete with

NRG **. The Company' s smart home services market faces competition from residential security companies as well as other companies that are able to bundle their existing offerings, such as cable, telecommunications and internet service, with automation and monitored security services, and from do- it- yourself smart home systems, which customers are able to install without subscription services** . The Company' s plant operations face competition from newer or more efficient plants owned by competitors, which may put some of the Company' s plants at a disadvantage to the extent these competitors are able to consume the same or less fuel as the Company' s plant. Over time, the Company' s plants may be unable to compete with these more efficient plants, which could result in **asset** retirements. NRG' s competitors may have greater liquidity, greater access to credit and other financial resources, lower cost structures, more effective risk management policies and procedures, greater ability to incur losses, longer- standing relationships with customers, greater brand awareness, greater potential for profitability from retail sales or greater flexibility in the timing of their sale of generation capacity and ancillary services than NRG does. Competitors may also have better access to subsidies or other out- of- market payments that put NRG at a competitive disadvantage. NRG' s competitors may be able to respond more quickly to new laws or regulations or emerging technologies, or devote greater resources to marketing of retail energy **and home services** than NRG can. In addition, current and potential competitors may make strategic acquisitions or establish cooperative relationships among themselves or with third parties. Accordingly, it is possible that new competitors or alliances among current and new competitors may emerge and rapidly gain significant market share. There can be no assurance that NRG will be able to compete successfully against current and future competitors, and any failure to do so would have a material adverse effect on the Company' s business, financial condition, results of operations and cash flow **. NRG' s strategy relies, in part, on its ability to cross- serve and optimize its network of retail and Smart Home services customers, and if it is unable to retain existing customers and expand their use of the Company' s products and services, its expected growth and operating results could be adversely affected. As part of NRG' s growth strategy, it is important for the Company to cross- sell energy sales and services to smart home services subscribers and smart home services to residential retail customers. As the Company continues pursuing cross- selling opportunities between these customers, there can be no assurances that its efforts in this regard will be successful. Additionally, for the Company to be successful in such cross- selling opportunities, it must retain its existing customers. The length of the terms for which NRG' s retail customers are contracted can be for multi- year periods, but many customers are contracted for a period of one year or less. Smart home services customers historically have entered into subscriptions that range from three to five years. These customers are not obligated to, and may not, renew their contracts or subscriptions after the expiration of their original commitments. If customers terminate their contracts, do not renew their contracts or do not expand their use of NRG' s products and services, the Company' s growth strategy may not be successful and its expected results of operations may be adversely affected** . NRG' s costs, results of operations, financial condition and cash flows could be adversely impacted by disruption of its fuel supplies. NRG relies on natural gas, coal and oil to fuel a majority of its power generation facilities. Grid operations depend on the continuing financial viability of contractual counterparties, as well as the infrastructure (including rail lines, rail cars, barge facilities, roadways, riverways and natural gas pipelines) available to serve generation facilities and to ensure that there is sufficient power produced to meet retail demand. As a result, the Company' s wholesale generation facilities are subject to the risks of disruptions or curtailments in the production of power at its generation facilities if no fuel is available at any price, if a counterparty fails to perform or if there is a disruption in the fuel delivery infrastructure. NRG routinely hedges both its wholesale sales and purchases to support its retail load obligations. In order to hedge these obligations, the Company may enter into long- term and short- term contracts for the purchase and delivery of fuel. Many of the forward power sales contracts do not allow the Company to pass through changes in fuel costs or discharge the power sale obligations in the case of a disruption in fuel supply due to force majeure events or the default of a fuel supplier or transporter. Disruptions in the Company' s fuel supplies or power supply arrangements may therefore require it to find alternative fuel sources at higher...... obligations, the Company would be required to supply replacement power either by running its other, higher cost power plants or by obtaining power from third- party sources at market prices that could substantially exceed the contract price ~~. If NRG fails~~ **, or to pay damages to counterparties for failure** to deliver ~~the~~ **power or sell electricity or natural gas as** contracted **. Any** ~~power, it would be required to pay the difference between the market price at the delivery point and the contract price, and the amount of~~ such **event** ~~payments could be substantial. NRG' s trading operations and use of hedging agreements could result in financial losses that negatively impact its results of operations, and NRG' s hedging activities may increase the volatility in the Company' s quarterly and annual financial results. The Company typically enters into hedging agreements, including contracts to purchase or sell commodities at future dates and at fixed prices, to manage the commodity price risks inherent in its business. The Company' s risk management policies and hedging procedures may not mitigate risk as planned, and the Company may fail to fully or effectively hedge its commodity supply and price risk. In addition, these activities, although intended to mitigate price volatility, expose the Company to other risks. When the Company sells or buys power or gas forward, it gives up the opportunity to buy or sell at the future price, which not only may result in lost opportunity costs but also may require the Company to post significant amounts of cash collateral or other credit support to its counterparties. The Company also relies on counterparty performance under its hedging agreements and is exposed to the credit quality of its counterparties under those agreements. Further, if the values of the financial contracts change in a manner that the Company does not anticipate, or if a counterparty fails to perform under a contract, it could harm the Company' s business, operating results or financial position. NRG does not typically hedge the entire exposure of its operations against commodity price volatility. To the extent it does not hedge against commodity price volatility, the Company' s results of operations and financial position may be improved or diminished based upon movement in commodity prices. NRG may engage in trading activities, including the trading of power, fuel and emissions allowances that are not directly related to the operation of the Company' s generation facilities or the management of related risks. These trading activities take place in volatile markets and some of these trades could be characterized as speculative. The Company would~~

~~expect to settle these trades financially rather than through the production of power or the delivery of fuel. This trading activity may expose the Company to the risk of significant financial losses which~~ could have a material adverse effect on **the Company** ' s financial performance.NRG also buys ~~significant quantities of~~ energy and fuel on a short- term or spot market basis.Prices sometimes rise or fall significantly over a relatively short period of time.The price NRG can obtain for the sale of energy may not rise at the same rate,or may not rise at all,to match a rise in fuel or delivery costs.Retail rates may also not rise at the same rate or may not rise at all.This may have a material adverse effect on the Company' s financial performance.NRG' s plant operating characteristics and equipment,particularly **at** its ~~business~~ **coal- fired plants, often dictate the specific fuel quality to be combusted. The availability** and **price of specific fuel qualities may vary due to supplier** financial ~~condition~~ **or operational disruptions, transportation disruptions and force majeure** . At times,coal of specific quality may not be available at any price or the Company may not be able to transport such coal to its facilities on a timely basis.In this case,the Company may not be able to run the coal facility even if it would be profitable.Operating a coal facility with different quality coal can lead to emission or operating problems.If the Company had sold forward the power from such a coal facility,it could be required to supply or purchase power from alternate sources,perhaps at a loss.This could have a material adverse impact on the financial results of specific plants and on the Company' s results of operations.There may be periods when NRG **will not be able to meet its commitments under forward sale or purchase obligations at a reasonable cost or at all. The Company may sell fixed price gas as a proxy for power. Because the obligations under most of the Company' s forward sale agreements are not contingent on a unit being available to generate power, NRG is** generally ~~attempts~~ **required** to ~~balance~~ **deliver power to the buyer, even in the event of a plant outage, fuel supply disruption or a reduction in the available capacity of the unit. To the extent that the Company does not have sufficient lower- cost capacity to meet** its ~~fixed~~ **commitments under its forward sale obligations, the Company would be required to supply replacement power either by running its other, higher cost power plants or by obtaining power from third** - **party sources** ~~price physical and financial purchases and sales commitments in terms of contract volumes and the timing of performance and delivery obligations through the use of financial and physical derivative contracts. These derivatives are accounted for in accordance with the FASB ASC 815, Derivatives and Hedging (" ASC 815"), which requires the Company to record all derivatives on the balance sheet~~ at ~~fair value with changes in the fair value resulting from fluctuations in the underlying commodity prices immediately recognized in earnings, unless the derivative qualifies for cash flow hedge accounting treatment or a scope exception. As a result, the Company' s quarterly and annual results are subject to significant fluctuations caused by changes in~~ market prices **that could substantially exceed the contract price. If NRG fails to deliver the contracted power, it would be required to pay the difference between the market price at the delivery point and the contract price, and the amount of such payments could be substantial** . NRG may not have sufficient liquidity to hedge market risks effectively. The Company is exposed to market risks through its retail and wholesale operations, which involve the purchase of electricity and natural gas for resale, the sale of energy, capacity and related products, and the purchase and sale of fuel, transmission services and emission allowances. These market risks include, among other risks, volatility arising from location and timing differences that may be associated with buying and transporting fuel, converting fuel into energy and delivering energy to a buyer. NRG undertakes **to hedge** these market activities through agreements with various counterparties. Many of the Company' s agreements with counterparties include provisions that require the Company to provide guarantees, offset or netting arrangements, letters of credit, a first lien on assets and / or cash collateral to protect the counterparties against the risk of the Company' s default or insolvency. The amount of such credit support that must be provided typically is based on the difference between the price of the commodity in a given contract and the market price of the commodity. Significant movements in market prices can result in the Company being required to provide cash collateral and letters of credit in very large amounts. The effectiveness of the Company' s strategy may depend on the amount of collateral available to enter into or maintain these contracts, and liquidity requirements may be greater than the Company anticipates or will be able to meet. Without a sufficient amount of working capital to post as collateral in support of performance guarantees or as a cash margin, the Company may not be able to manage price volatility effectively or to implement its strategy. An increase in the amount of letters of credit or cash collateral required to be provided to the Company' s counterparties may negatively affect the Company' s liquidity and financial condition. Further, if retail customers use more power or gas than expected, or if any of NRG' s facilities experience unplanned outages, the Company may be required to procure additional power or gas at spot market prices to fulfill contractual commitments. Without adequate liquidity to meet margin and collateral requirements, the Company may be exposed to significant losses, may miss significant opportunities, and may have increased exposure to the volatility of spot markets. **NRG' s** ~~,Services and Smart Home~~ businesses **and changes in data privacy and data protection laws and regulations or any failure to comply with such laws and regulations could adversely affect the Company' s business and financial results.NRG' s retail business** may need to provide sensitive customer data to vendors and service providers who require access to this information in order to provide services,such as call center operations,to ~~such~~ **the retail** ~~businesses~~ -- **business** ~~.The services and the networks and information systems utilized by the Company may be at risk for breaches as a result of third- party actions,employee or vendor error,malfeasance or other factors~~ .Although the Company takes precautions to protect its infrastructure,it has been,and will likely continue to be,subject to attempts at phishing and other cybersecurity intrusions.International conflict increases the risk of state- sponsored cyber threats and escalated use of cybercriminal and cyber- espionage activities.In particular,the current geopolitical climate has further escalated cybersecurity risk,with various government agencies,including the U.S.Cybersecurity & Infrastructure Security Agency,issuing warnings of increased cyber threats,particularly for U.S.critical infrastructure.While the Company has not experienced a cyber / data event causing any material operational,reputational or financial impact,it recognizes the growing threat within the general marketplace and the industry,and there is no assurance that NRG will be able to prevent any such impacts in the future.If a material breach of the Company' s information technology systems were to occur,the critical operational capabilities and reputation of NRG relies on storage, transportation assets and suppliers, which it does not own or control, to deliver natural gas. The Company depends on natural gas pipelines and other transportation and storage facilities owned and operated by third parties to deliver natural gas to wholesale and retail markets and to provide retail energy services to customers. The Company' s ability to provide natural gas for its present and projected customers will depend upon its suppliers' ability to obtain and deliver supplies of natural gas, as well as NRG' s ability to acquire supplies ~~directly from new sources~~ . Factors beyond the control of the Company and its suppliers may affect the Company' s ability to deliver such supplies. These factors include other parties' control over the drilling of new wells and the facilities to transport natural gas to the Company' s receipt points, development of additional interstate pipeline infrastructure, availability of supply sources competition for the acquisition of natural gas, priority allocations, impact of severe weather disruptions to natural gas supplies and the regulatory and pricing policies of federal and state regulatory agencies, as well as the availability of Canadian reserves for export to the U. S. Energy deregulation legislation may increase competition among natural gas utilities and impact the quantities of natural gas requirements needed for sales service. If supply, transportation or storage is disrupted, including for reasons of force majeure, the ability of the Company to sell and deliver its products and services may be hindered. As a result, the Company may be responsible for damages incurred by its customers, such as the additional cost of acquiring alternative supply at then- current market rates. These conditions could have a material impact on the Company' s financial condition, results of operations and cash flows. Operation of power generation facilities involves significant risks and hazards customary to the power industry that could have a material adverse effect on NRG' s revenues and results of operations, and NRG may not have adequate insurance to cover these risks and hazards. The ongoing operation of NRG' s facilities involves risks that include the breakdown or failure of equipment or processes, performance below expected levels of output or efficiency and the inability to transport the Company' s products to its customers in an efficient manner due to a lack of transmission capacity. Unplanned outages of generating units, including extensions of scheduled outages due to mechanical failures or other problems occur from time to time and are an inherent risk of the Company' s business. Unplanned outages typically increase the Company' s operation and maintenance expenses and may reduce the Company' s revenues as a result of selling fewer MWh or incurring non- performance penalties and / or require NRG to incur significant costs as a result of obtaining replacement power from third parties in the open market or running one of its higher cost units to satisfy the Company' s forward power sales obligations. NRG' s inability to operate the Company' s plants efficiently, manage capital expenditures and costs, and generate earnings and cash flow from the Company' s asset- based businesses could have a material adverse effect on the Company' s results of operations, financial condition or cash flows. In addition, NRG provides plant operations and commercial services to a variety of third parties. There is a risk that mistakes, mis- operations ~~,~~ or actions taken by these third parties could be attributed to NRG, including the risk of investigation or penalties being assessed to NRG in connection with the services it offers, or that regulators could question whether NRG had the appropriate safeguards in place. Power generation involves hazardous activities, including acquiring, transporting and unloading fuel, operating large pieces of rotating equipment and delivering electricity to transmission and distribution systems. In addition to natural risks such as earthquake, flood, lightning, hurricane and wind, other hazards, such as fire, explosion, structural collapse and machinery failure are inherent risks in the Company' s operations. These and other hazards can cause significant personal injury or loss of life, severe damage to and destruction of property, plant and equipment, contamination of, or damage to, the environment and suspension of operations. The occurrence of any one of these events may result in NRG being named as a defendant in lawsuits asserting claims for substantial damages, including for environmental cleanup costs, personal injury and property damage and fines and / or penalties. NRG maintains an amount of insurance protection that it considers adequate, obtains warranties from vendors and obligates contractors to meet certain performance levels, but the Company cannot provide any assurance that these measures will be sufficient or effective under all circumstances and against all hazards or liabilities to which it may be subject. A successful claim for which the Company is not adequately insured or protected could hurt its financial results and materially harm NRG' s financial condition. NRG cannot provide any assurance that its insurance coverage will continue to be available at all or at rates or on terms similar to those presently available. Any losses not covered by insurance could have a material adverse effect on the Company' s financial condition, results of operations or cash flows. Supplier and / or customer concentration **, the inability of suppliers to meet their obligations and dependence on third- party service providers** may expose the Company to significant financial credit or performance risks **and adversely affect NRG' s results of operations, cash flows and financial condition** . NRG often relies on a single contracted supplier or a small number of suppliers for the provision and transportation of fuel, chemicals and other services required for the operation of certain of its facilities. If these suppliers cannot perform these services, the Company utilizes the marketplace. There can be no assurance that the marketplace can provide these services as, when and where required or at comparable prices. The Company ~~may~~ also ~~hedge~~ **relies on** a ~~portion~~ **number** of **sole or limited source suppliers for critical components for** its ~~exposure to power~~ **smart home products** and **services, and** ~~fuel price fluctuations through various physical or financial agreements with counterparties. Counterparties to these~~ **those services are dependent** ~~agreements may breach or may be unable to perform their obligations, and in case of renewable generation, such counterparties may be subject to additional risks, such as facility development and transmission risks, unfavorable weather and atmospheric conditions, and mechanical or operational failures. NRG may not be able to enter into replacement agreements~~ on **third- party cellular** ~~terms as favorable as its existing agreements~~ , **telecommunications** ~~or at all. If the Company is unable to enter into replacement purchase agreements or other replacement hedging agreements, the Company would be exposed to market price volatility~~ and **/ or internet providers** ~~the risk that fuel and transportation may not be available during certain periods at any price~~ . The failure of any supplier or customer to fulfill its contractual obligations to NRG **, the inability of NRG to source products and services on acceptable terms, if at all, and the failure of third parties to provide services to its customers that are necessary for the Company' s smart home services** could have a material adverse effect on the Company' s financial results. ~~Consequently~~ **As a result** , the financial performance of the Company' s facilities is dependent on the credit quality of, and continued performance by, suppliers and customers **, which cannot be guaranteed** . Maintenance, expansion and refurbishment of power generation facilities involve significant risks that could result in unplanned power outages or reduced output and could have a material adverse effect on NRG' s results of operations, cash flows and financial condition. NRG' s facilities require periodic maintenance and repair. Any unexpected failure, including failure associated with breakdowns, forced outages or any unanticipated capital expenditures could result in reduced profitability. NRG cannot be certain of the level of capital expenditures that will be required due to changing environmental and safety laws (including changes in the interpretation or enforcement thereof), needed facility repairs and unexpected events (such as natural disasters or terrorist attacks). The unexpected requirement of large capital expenditures could have a material adverse effect on the Company' s liquidity and financial condition ~~. NRG and its subsidiaries have guaranteed the performance of third parties, which may result in substantial costs in the event of non- performance. NRG and its subsidiaries have issued certain guarantees of the performance of others, which obligate NRG and its subsidiaries to perform in the event that the third parties do not perform. In the event of non- performance by the third parties, NRG could incur substantial cost to fulfill their obligations under these guarantees. Such performance guarantees could have a material impact on the operating results, financial condition, or cash flows of the Company~~ . NRG relies on power transmission and distribution facilities that it does not own or control and that are subject to transmission constraints within a number of the Company' s core regions. NRG depends on transmission and distribution facilities owned and operated by others to deliver power to its customers. If transmission or distribution is disrupted, including by force majeure events, or if the transmission or distribution infrastructure is inadequate, NRG' s ability to deliver power may be adversely impacted. The Company also cannot predict whether transmission or distribution facilities will be expanded in specific markets to accommodate competitive access to those markets. In addition, in certain of the markets in which NRG operates, energy transmission congestion may occur and the Company may be deemed responsible for congestion costs associated with power sales or purchases, or retail sales, particularly where the Company’ s load is not co- located with its retail sales obligations. If NRG were liable for such congestion costs, the Company' s financial results could be adversely affected. Rates and terms for service of certain residential and commercial customers in Alberta are subject to regulatory review and approval. The Company owns Direct Energy Regulated Services, which serves as a regulated rate supplier for residential and commercial energy customers in portions of the province of Alberta. It is required to engage in regulatory approval proceedings as a part of the process of establishing the terms and rates for sales of power and natural gas. These proceedings typically involve multiple parties, including governmental bodies and officials, consumer advocacy groups and various consumers of energy, who have differing concerns but also have the common objective of limiting rate increases or even reducing rates. Decisions are subject to appeal, potentially leading to additional uncertainty associated with the approval proceedings. The potential duration of such proceedings creates a risk that rates ultimately approved by the applicable regulatory body may not be sufficient for the Company to recover its costs by the time the rates become effective. Established rates are also subject to subsequent reviews by regulators, whereby various portions of rates could be adjusted, subject to refund or disallowed. In certain instances, the Company could agree to negotiated settlements related to various rate matters and other cost recovery elements. These settlements are subject to regulatory approval. The ultimate outcome and timing of regulatory rate proceedings have a significant effect on the Company to recover its costs or earn an adequate return. In addition, subsequent legislative or regulatory action could alter the terms on which the regulated business operates and future earnings could be negatively impacted. The Company also operates a competitive energy supply business in Alberta that is not subject to rate regulation and is subject to stringent requirements to segregate operations and information relating to the competitive business from the regulated business. Failure to comply with these and other requirements on the business could subject the Company' s regulated and competitive businesses in Alberta to fines, penalties, and restrictions on the ability to continue business. Because NRG owns less than a majority of the ownership interests of some of its project investments, the Company cannot exercise complete control over their operations. NRG has limited control over the operation of some project investments and joint ventures because the Company' s investments are in projects where it beneficially owns less than a majority of the ownership interests. NRG seeks to exert a degree of influence with respect to the management and operation of projects in which it owns less than a majority of the ownership interests by negotiating to obtain positions on management committees or to receive certain limited governance rights, such as rights to veto significant actions. However, the Company may not always succeed in such negotiations. NRG may be dependent on its co- venturers to operate such projects. The Company' s co- venturers may not have the level of experience, technical expertise, human resources management or other attributes necessary to operate these projects optimally. The approval of co- venturers also may be required for NRG to receive distributions of funds from projects or to transfer the Company' s interest in projects. ~~NRG may be unable to integrate the operations of acquired entities in the manner expected. NRG enters into acquisitions that result in various benefits, including, among other things, cost savings and operating efficiencies. Achieving the anticipated benefits of these acquisitions depends on whether the businesses can be integrated into NRG in an efficient and effective manner. The integration process could take longer than anticipated and could result in the loss of valuable employees, the disruption of NRG' s businesses, processes and systems or inconsistencies in standards, controls, procedures, practices, policies and compensation arrangements, any of which could divert the attention of management and adversely affect the Company' s ability to achieve the anticipated benefits of the acquisitions. NRG may have difficulty addressing possible differences in corporate cultures and management philosophies. Failure to achieve these anticipated benefits could result in increased costs or decreases in the amount of expected revenues and could adversely affect NRG' s future business, financial condition, operating results and prospects.~~ Future acquisition or disposition activities could involve unknown risks and may have materially adverse effects and NRG may be subject to trailing liabilities from businesses that it disposes of or that are inactive. NRG may in the future acquire or dispose of businesses or assets, acquire or sell books of retail customers, or pursue other business activities, directly or indirectly **,** through subsidiaries ~~,~~ that involve a number of risks. The acquisition of companies and assets **, and their integration,** is subject to substantial risks, including the failure to identify material problems during due diligence, the risk of over- paying for assets or customers, the inability to retain customers and the inability to arrange financing for an acquisition as may be required or desired. Further, the integration and consolidation of acquisitions requires substantial human, financial and other resources and, ultimately, the Company' s acquisitions may not be successfully integrated. In the case of dispositions, such risks may relate to employment matters, counterparties, regulators and other stakeholders in the disposed business, the separation of disposed assets from NRG' s business, the management of NRG' s ongoing business, and other financial, legal and operational matters related to such disposition, which may be unknown to NRG at the time. In addition, NRG may be subject to material trailing liabilities from disposed businesses. Any such risk may result in one or more costly disputes or litigation. There can be no assurances that any future acquisitions will perform as expected or that the returns from such acquisitions will support the indebtedness incurred to acquire them or the capital expenditures needed to develop them. There can also be no assurances that NRG will realize the anticipated benefits from any such dispositions. The failure to realize the anticipated returns or benefits from an acquisition or disposition could adversely affect NRG' s results of operations, cash flows and financial condition. **Negative publicity may** ~~The operation of the Company' s businesses is subject to advanced persistent cyber- based security threats and integrity risk. Attacks on NRG' s infrastructure that breach cyber / data security measures could expose the Company to significant liabilities, reputational~~ damage ~~, regulatory action, and disrupt business operations, which could have a material adverse effect. Numerous functions affecting the efficient operation of~~ NRG ~~' s businesses depend on the secure and reliable storage, processing and communication of electronic data and the use of sophisticated computer hardware and software systems, much of which is connected (directly or indirectly) to the internet. As a result, NRG~~ ' s **reputation or** ~~information technology systems and infrastructure, and those of~~ its ~~vendors~~ **brands** and **negatively** suppliers, are susceptible to cyber-...... increased regulation and other actions that could impact NRG' s businesses and changes in...... the critical operational capabilities and reputation of its business ~~may be adversely affected~~ , **financial condition** ~~customer confidence may be diminished~~ , **results** ~~and NRG may be subject to substantial legal or regulatory scrutiny and claims, any~~ of ~~which may contribute to potential legal or regulatory actions against the Company, loss of customers and otherwise have a material adverse effect. Any loss or disruption of critical operational capabilities to support the Company' s generation, commercial or retail~~ operations ~~, loss of customers, or loss of confidential or proprietary data through a breach, unauthorized access, disruption, misuse or disclosure could adversely affect NRG' s reputation, expose the Company to material legal or regulatory claims~~ and ~~impair the Company' s~~ ability to **attract** ~~execute its business strategy, which could have a material adverse effect. In addition, NRG may experience increased capital~~ and ~~operating costs to implement increased security for its information technology infrastructure. NRG cannot provide any assurance that such events and impacts will not be material in the future, and the Company' s efforts to deter, identify and mitigate future breaches may require additional significant capital and may not be successful. Negative publicity may damage NRG' s reputation~~ ---- **retain** ~~or its brands~~ **highly qualified employees** . NRG' s reputation and brands could be damaged for numerous reasons, including negative views of the Company' s environmental impact, sustainability goals, supply chain practices, product and service offerings, sponsorship relationships, charitable giving programs and public statements made by Company officials **. Additionally, the Company is from time to time named in investigations, claims and lawsuits arising in the ordinary course of business, and customers have in the past communicated complaints to consumer protection organizations, regulators or the media. Negative claims or publicity regarding the Company or its operations, offerings, practices or customer service may damage its brands or reputation, even if such claims are untrue** . The Company may also experience criticism or backlash from media, customers, employees, government entities, advocacy groups and other stakeholders that disagree with positions taken by the Company or its executives. If the Company' s brands or reputation are damaged, it could negatively impact the Company' s business, financial condition, results of operations, and ability to attract and retain highly qualified employees. Risks that are beyond NRG' s...... significant loss of retail customer demand. The Company has made investments ~~, and may continue to make investments, in new business initiatives predominantly~~ focused on consumer products ~~and in markets~~ that may not be successful, may not achieve the intended financial results or may result in product liability and reputational risk that could adversely affect the Company. **The** ~~NRG continues to pursue growth in its existing businesses and markets and further diversification across the competitive energy value chain. Such initiatives may involve significant risks and uncertainties, including distraction of management from current operations, inadequate return on capital, and unidentified issues not discovered in the diligence performed prior to launching an initiative or entering a market. As part of these initiatives, the~~ Company may be liable to customers for any damage caused to customers' homes, facilities, belongings or property during the installation of Company products and systems, such as **smart home systems,** home back- up generators and residential HVAC system repairs, installation and replacements. Where such work is performed by independent contractors, such as repairs performed under the Company' s home ~~warranty and~~ protection plan products, the Company may nonetheless face claims and costs for damage. In addition, shortages of skilled labor for Company projects could significantly delay a project or otherwise increase its costs. The products that the Company sells or manufactures may expose the Company to product liability claims relating to personal injury, death, or environmental or property damage, and may require product recalls or other actions. Although the Company maintains liability insurance **and its service contracts limit Company liability** , the Company cannot be certain that its coverage will be adequate for liabilities actually incurred or that insurance will continue to be available to the Company on economically reasonable terms, or at all **, or that contractual limitations will be enforced. The laws of some states limit or prohibit insurance coverage for certain liabilities and actions, and any significant uninsured damages could have a material adverse effect on the Company' s business, financial condition and cash flows** . Further, any product liability ~~claim~~ **claims** or damage caused by the Company could significantly impair the Company' s brand and reputation, which may result in a failure to maintain customers and achieve the Company' s desired growth initiatives in these new businesses. Changes in technology may impair the value of **,** ~~NRG' s power plants~~ and the attractiveness of **,** its retail products, **smart home services** and **NRG' s** ~~the Company may potentially be affected by emerging technologies that may over time affect change in capacity markets and the energy industry overall with the inclusion of distributed~~ generation **facilities** ~~and clean technology~~ . Research and development activities are ongoing in the industry to provide alternative and more efficient technologies to produce power, including wind, photovoltaic (solar) cells, hydrogen, energy storage, and improvements in traditional technologies and equipment, such as more efficient gas turbines. Advances in these or other technologies **, including through artificial intelligence,** could reduce the costs of power production to a level below what the Company has currently forecasted, which could adversely affect its cash flows, results of operations or competitive position. Technology, including distributed technology or changes in retail rate structures, may also have a material impact on the Company' s ability to retain retail customers **. Further, technological innovation and changes could cause the Company' s smart home products and services to become obsolete, or otherwise more expensive and less effective than those of competitors, putting the Company at a competitive disadvantage** . Some emerging technologies, such as distributed renewable energy technologies, broad consumer adoption of electric vehicles and energy storage devices, could affect the price of energy. These emerging technologies may affect the financial viability of utility counterparties and could have significant impacts on wholesale market prices, which could ultimately have a material adverse effect on NRG' s financial condition, results of operations and cash flows. **The Company' s smart home services rely on intellectual property and any failure to adequately protect such intellectual property, or claims that the Company has infringed on others' intellectual property rights, could have an adverse effect on its business and operations and result in a competitive disadvantage. The Company relies on a combination of patent, trademark, copyright and trade secret laws of the United States and other countries and a combination of confidentiality procedures, contractual provisions and other methods, to protect its intellectual property, all of which offer only limited protection. If the Company fails to acquire the necessary intellectual property rights or adequately protect or assert its intellectual property rights, competitors may manufacture and market similar products and services or convert customers, which could adversely affect market share and results of operations for smart home services. In addition, patent rights may not prevent competitors from developing, using or selling products or services that are similar to or address the same market as the Company' s smart home products and services. Certain of the Company' s smart home solutions contain software modules licensed under " open- source " licenses, which may entail greater risks than the use of third- party commercial software, as open- source licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code. Further, if proprietary software is combined with open- source software, in certain cases the Company could be required to release the source code of the proprietary software to the public, allowing competitors to create similar products with lower development effort and time. It is possible that certain of the Company' s smart home products and services or those of third parties incorporated into its offerings could infringe the intellectual property rights of others. From time to time, Vivint Smart Home has been subject to claims based on allegations of infringement, misappropriation or other violations of the intellectual property rights of others. If the Company is unable to successfully defend against such claims or license necessary third- party technology or other intellectual property on acceptable terms it may be required to develop alternative, non- infringing technology, which could require significant time, effort, and expense and may ultimately not be successful.** NRG' s business, financial condition and results of operations could be adversely impacted by strikes or work stoppages by its unionized employees or inability to replace employees as they retire. As of December 31, ~~2022~~ **2023** , approximately ~~12~~ **4** % of NRG' s employees were covered by collective bargaining agreements. In the event that the Company' s union employees strike, participate in a work stoppage or slowdown or engage in other forms of labor strife or disruption, NRG would be responsible for procuring replacement labor or the Company could experience reduced power generation or outages. Although NRG' s ability to procure such labor is uncertain, contingency staffing planning is completed as part of each respective contract negotiation. Strikes, work stoppages or the inability to negotiate future collective bargaining agreements on favorable terms could have a material adverse effect on the Company' s business, financial condition, results of operations and cash flows. In addition, a number of the Company' s employees at NRG' s plants are close to retirement. The Company' s inability to replace retiring workers could create potential knowledge and expertise gaps as such workers retire. NRG' s **Risks that** are beyond NRG' s control,including but not limited to acts of terrorism or related acts of war,natural disaster or other catastrophic events could have a material adverse effect on NRG' s financial condition,results of operations and cash flows.NRG' s generation facilities and the facilities of third parties on which they rely may be targets of terrorist activities,as well as events occurring in response to or in connection with such activities,all of which could cause environmental repercussions and / or result in full or partial disruption of the facilities ability to generate,transmit,transport or distribute electricity or natural gas.Strategic targets,such as energy- related facilities,may be at greater risk of future terrorist activities than other domestic targets.Any such environmental repercussions or disruption could result in a significant decrease in revenues or significant reconstruction or remediation costs beyond what could be recovered through insurance policies,which could have a material adverse effect on the Company' s financial condition,results of operations and cash flows.In addition,significant weather events or terrorist actions could damage or shut down the power or gas transmission and distribution facilities upon which the Company is dependent,which may reduce retail volume for extended periods of time.Power or gas supply may be sold at a loss if these events cause a significant loss of retail customer demand. ~~NRG'~~ business is subject to substantial energy regulation and may be adversely affected by legislative or regulatory changes, as well as liability under, or any future inability to comply with, existing or future energy regulations or requirements. NRG' s business is subject to extensive U. S. federal, state and local laws and foreign laws. Compliance with, or changes to, the requirements under these legal regimes may cause the Company to incur significant additional costs, reduce the Company' s ability to hedge exposure or to sell retail power within certain states or to certain classes of retail customers, or restrict the Company' s marketing practices, its ability to pass through costs to retail customers, or its ability to compete on favorable terms with competitors, including the incumbent utility. Retail competition and home ~~warranty~~ **protection** services are regulated on a state- by- state or at the province- by- province level and are highly dependent on state and provincial laws, regulations and policies, which could change at any moment. Failure to comply with such requirements could result in the shutdown of a non- complying facility **or line of business** , the imposition of liens, fines, and / or civil or criminal liability.

Public utilities under the FPA are required to obtain FERC acceptance of their rate schedules for wholesale sales of electricity. Except for ERCOT generation facilities and power marketers, all of NRG' s non- qualifying facility generating companies and power marketing affiliates in the U. S. make sales of electricity in interstate commerce and are public utilities for purposes of the FPA. FERC has granted each of NRG' s generating and power marketing companies that make sales of electricity outside of ERCOT the authority to sell electricity at market- based rates. FERC' s orders that grant NRG' s generating and power marketing companies market- based rate authority reserve the right to revoke or revise that authority if FERC subsequently determines that NRG can exercise market power in transmission or generation, create barriers to entry, or engage in abusive affiliate transactions. In addition, NRG' s market- based sales are subject to certain market behavior rules, and if any of NRG' s generating and power marketing companies were deemed to have violated those rules, they are subject to potential disgorgement of profits associated with the violation and / or suspension or revocation of their market- based rate authority. If NRG' s generating and power marketing companies were to lose their market- based rate authority, such companies would be required to obtain FERC' s acceptance of a cost- of- service rate schedule and could become subject to the accounting, record- keeping, and reporting requirements that are imposed on utilities with cost- based rate schedules. This could have a material adverse effect on the rates NRG charges for power from its facilities. **The** ~~Substantially all of the~~ Company' s generation assets are also subject to the reliability standards promulgated by the designated Electric Reliability Organization (currently NERC) and approved by FERC. If NRG fails to comply with the mandatory reliability standards, NRG could be subject to sanctions, including substantial monetary penalties and increased compliance obligations. NRG is also affected by legislative and regulatory changes, as well as changes to market design, market rules, tariffs, cost allocations, and bidding rules that occur in the existing ISOs. The ISOs that oversee most of the wholesale power markets impose, and in the future may continue to impose, mitigation, including price limitations, offer caps, non- performance penalties and other mechanisms to address some of the volatility and the potential exercise of market power in these markets. These types of price limitations and other regulatory mechanisms may have a material adverse effect on the profitability of NRG' s generation facilities that sell energy and capacity into the wholesale power markets. The regulatory environment is subject to significant changes due to state and federal policies affecting wholesale and retail competition and the creation of incentives for the addition of large amounts of new renewable generation and, in some cases, transmission. These changes are ongoing, and the Company cannot predict the future design of the wholesale power markets or the ultimate effect that the changing regulatory environment will have on NRG' s business. In addition, in some of these markets, interested parties have proposed material market design changes. If competitive restructuring of the electric power markets is reversed, discontinued, or delayed, the Company' s business prospects and financial results could be negatively impacted. In addition, there have been a number of reforms to the regulation of the derivatives markets, both in the United States and internationally. These regulations, and any further changes thereto, or adoption of additional regulations, including any regulations relating to position limits on futures and other derivatives or margin for derivatives, could negatively impact NRG' s ability to hedge its portfolio in an efficient, cost- effective manner by, among other things, potentially decreasing liquidity in the forward commodity and derivatives markets or limiting NRG' s ability to utilize non- cash collateral for derivatives transactions. NRG' s business may be affected by interference in the competitive wholesale marketplace. NRG' s generation and competitive retail operations rely on a competitive wholesale marketplace. The competitive wholesale marketplace may be impacted by out- of- market subsidies ~~, including bailouts of uneconomic nuclear plants~~ , imports of power from Canada, renewable mandates or subsidies, mandates to sell power below its cost of acquisition and associated costs as well as out- of- market payments to new or existing generators. These out- of- market subsidies to existing or new generation undermine the competitive wholesale marketplace, which can lead to premature retirement of existing facilities, including those owned by the Company. If these measures continue, capacity and energy prices may be suppressed, and the Company may not be successful in its efforts to insulate the competitive market from this interference. The Company' s retail operations may be materially impacted by rules or regulations that allow regulated utilities to participate in competitive retail markets or own and operate facilities that could be provided by competitive market participants. Additions or changes in tax laws and regulations could potentially affect the Company' s financial results or liquidity. NRG is subject to various types of tax arising from normal business operations in the jurisdictions in which the Company operates. Any additions or changes to tax legislation, or their interpretation and application, including those with retroactive effect, could have a material adverse effect on NRG' s financial condition and results of operations, including income tax provision and accruals reflected in the consolidated financial statements. **Beginning in** ~~The Inflation Reduction Act, enacted on August 16, 2022~~ **2023** , ~~includes~~ the ~~implementation of~~ **Company is now subject to** a 15 % corporate alternative minimum tax ~~(" CAMT ") effective in 2023~~ **as a result of the Inflation Reduction Act** . The CAMT may lead to volatility in the Company' s cash tax payment obligations, particularly in periods of significant commodity or currency variability resulting from potential changes in the fair value of derivative instruments ~~. There remains unanswered questions on how the operative rules for CAMT will be implemented and interpreted~~ . The Company continuously monitors and assesses proposed tax legislation that could negatively impact its business. The ~~integration of the~~ Capacity Performance product into the PJM market could lead to substantial changes in capacity income and non- performance penalties, which could have a material adverse effect on NRG' s results of operations, financial condition and cash flows. PJM operates a pay- for- performance model where capacity payments are modified based on real- time generator performance. Capacity market prices are sensitive to design parameters, as well as additions of new capacity. NRG may experience substantial changes in capacity income and incur non- performance penalties, which could have a material adverse effect on NRG' s results of operations, financial condition and cash flows. NRG ~~' s ownership interest in a nuclear power facility subjects the Company to regulations, costs and liabilities uniquely associated with these types of facilities. Under the Atomic Energy Act of 1954, as amended (" AEA"), ownership and operation of STP, of which NRG indirectly owns a 44 % interest, is subject to regulation by the NRC. Such regulation includes licensing, inspection, enforcement, testing, evaluation and modification of all aspects of nuclear reactor power plant design and operation, environmental and safety performance, technical~~

~~and financial qualifications, decommissioning funding assurance and transfer and foreign ownership restrictions. The current facility operating licenses for STP expire on August 20, 2047 (Unit 1) and December 15, 2048 (Unit 2). There are unique risks to owning and operating a nuclear power facility. These include liabilities related to the handling, treatment, storage, disposal, transport, release and use of radioactive materials, particularly with respect to spent nuclear fuel, and uncertainties regarding the ultimate, and potential exposure to, technical and financial risks associated with modifying or decommissioning a nuclear facility. The NRC could require the shutdown of the plant for safety reasons or refuse to permit restart of the unit after unplanned or planned outages. New or amended NRC safety and regulatory requirements may give rise to additional operation and maintenance costs and capital expenditures. Additionally, aging equipment may require more capital expenditures to keep each of these nuclear power plants operating efficiently. This equipment is also likely to require periodic upgrading and improvement. Any unexpected failure, including failure associated with breakdowns, forced outages, or any unanticipated capital expenditures, could result in reduced profitability. STP will be obligated to continue storing spent nuclear fuel if the U. S. DOE continues to fail to meet its contractual obligations to STP made pursuant to the U. S. Nuclear Waste Policy Act of 1982 to accept and dispose of STP' s spent nuclear fuel. Costs associated with these risks could be substantial and could have a material adverse effect on NRG' s results of operations, financial condition or cash flow to the extent not covered by the Decommissioning Trusts or recovered from ratepayers. In addition, to the extent that all or a part of STP is required by the NRC to permanently or temporarily shut down or modify its operations, or is otherwise subject to a forced outage, NRG may incur additional costs to the extent it is obligated to provide power from more expensive alternative sources — either NRG' s own plants, third- party generators or the ERCOT — to cover the Company' s then existing forward sale obligations. Such shutdown or modification could also lead to substantial costs related to the storage and disposal of radioactive materials and spent nuclear fuel. While STP maintains property and liability insurance for losses related to nuclear operations, there may be limitations on the amounts and types of insurance commercially available. See also Item 15 — Note 23, Commitments and Contingencies, Nuclear Insurance. An accident at STP or another nuclear facility could have a material adverse effect on NRG' s financial condition, its operational results, reputation, or liquidity as losses may exceed the insurance coverage available and / or may result in the obligation to pay retrospective premium obligations. NRG~~ is subject to environmental laws that impose extensive and increasingly stringent requirements on the Company' s ongoing operations, as well as potentially substantial liabilities arising out of environmental contamination. These environmental requirements and liabilities could adversely impact NRG' s results of operations, financial condition and cash flows. NRG is subject to the environmental laws of foreign and U. S., federal, state and local authorities. The Company must comply with numerous environmental laws and obtain numerous governmental permits and approvals to build and operate the Company' s plants. Federal and state environmental laws generally have become more stringent over time. Should NRG fail to comply with any environmental requirements that apply to its operations, the Company could be subject to administrative, civil and / or criminal liability and fines, and regulatory agencies could take other actions seeking to curtail the Company' s operations. In addition, when new requirements take effect or when existing environmental requirements are revised, reinterpreted or subject to changing enforcement policies, NRG' s business, results of operations, financial condition and cash flows could be adversely affected. NRG' s businesses are subject to physical, market and economic risks relating to potential effects of climate change, and policies at the national, regional and state levels to regulate GHG emissions and mitigate climate change which could adversely impact NRG' s results of operations, financial condition and cash flows. Fluctuations in weather and other environmental conditions, including temperature and precipitation levels, may affect consumer demand for electricity or natural gas. In addition, the potential physical effects of climate change, such as increased frequency and severity of storms, floods and other climatic events, could disrupt NRG' s operations and supply chain, and cause it to incur significant costs in preparing for or responding to these effects. These or other changes in climate could lead to increased operating costs or capital expenses. NRG' s customers may also experience the potential physical impacts of climate change and may incur significant costs in preparing for or responding to these efforts, including changing the fuel mix and resiliency of their energy solutions and supply ~~. Hazards customary to the power production industry include the potential for unusual weather conditions, which could affect fuel pricing and availability, the Company' s route to market or access to customers, i. e., transmission and distribution lines, transportation and delivery, or critical plant assets~~ . The contribution of climate change to the frequency or intensity of weather- related events could affect NRG' s operations and planning process. Climate change could also affect the availability of a secure and economical supply of water in some locations, which is essential for the continued operation of NRG' s generation plants. NRG monitors water supply risk carefully. If it is determined that a water supply risk exists that could impact projected generation levels at any plant, risk mitigation efforts are identified and evaluated for implementation. Further, demand for NRG' s energy- related services could be similarly impacted by consumers’ preferences or market or regulatory factors favoring energy efficiency, lower carbon energy sources or reduced electricity or natural gas usage. NRG' s GHG emissions reduction targets can be found in Item 1, Business — Environmental Regulatory Matters. The Company' s ability to achieve these targets depends on many factors, including the ability to retire high emitting assets, ability to reduce emissions based on technological advances and innovation, and ability to source energy from less carbon intense resources. In addition, any future decarbonization efforts may increase costs, or NRG may otherwise be limited in its ability to apply them. The cost associated with NRG' s GHG emissions reduction goals could be significant. Failure to achieve the Company' s emissions targets could result in a negative impact on access to and cost of capital, changing investor sentiment regarding investment in the Company or reputation harm. Enhanced data privacy and data protection laws and regulations or any non- compliance with such laws and regulations, could adversely affect NRG’ s business and financial results. The consumer privacy landscape continues to experience momentum for greater privacy protection and reform at the state and federal level in response to precedents set forth by the General Data Protection Regulation (the" GDPR") and the California Consumer Privacy Act (the" CCPA"). The development and evolving nature of domestic and international privacy regulation and enforcement could impact and potentially limit how NRG processes personally identifiable information.

~~Beginning January 1, 2023,~~ California residents **now** have increased access rights (including the right to limit the use and disclosure of sensitive personal information), which are enforced by a new state privacy regulator, resulting in more scrutiny of business practices and disclosures. Additional states including Virginia, Utah, Connecticut, Colorado, ~~and~~ Nevada **and Texas** have similarly adopted enhanced data privacy legislation ~~effective in 2023~~ and patterned after the standards set forth by CCPA, including broader data access rights, with Virginia going a step further requiring businesses to perform data protection assessments for certain processing activities. **The Company is also bound by contractual requirements relating to privacy and data protection, and may agree to additional contractual requirements addressing these matters from time to time.** As new laws and regulations are created, **amended or expanded,** requiring businesses to implement processes to enable ~~customer~~ **customers** access to their data and enhanced data protection and management standards, NRG cannot forecast **with any certainty** the impact that they may have on the Company' s business **; however, it is possible the Company may find it necessary or desirable to change certain of its business practices or to expend resources to modify its home products and services and otherwise adapt to these changes. It is possible that the Company may be unable to make such changes and modifications in a commercially reasonable manner or at all, and its ability to develop new home services and features could be limited** . Any non- compliance with laws may result in proceedings or actions against the Company by governmental entities or individuals. Moreover, any inquiries or investigations, government penalties or sanctions, or civil actions by individuals may be costly to comply with, resulting in negative publicity, increased operating costs, significant management time and attention, and may lead to remedies that harm the business, including fines, demands or orders that existing business practices be modified or terminated. NRG' s retail operations **and smart home services** are subject to changing rules and regulations that could have a material impact on the Company' s profitability. The competitiveness of NRG' s retail operations partially depends on regulatory policies that establish the structure, rules, terms and conditions ~~on~~ **upon** which services are offered to retail customers. These policies can include, among other things, controls on the retail rates that NRG can charge, the imposition of additional costs on sales, restrictions on the Company' s **sell certain types of products or** ability to obtain new customers through various marketing channels and disclosure requirements. The Company' s retail operations may be materially impacted by rules or regulations that allow regulated utilities to participate in competitive retail markets or own and operate facilities that could be provided by competitive market participants. Additionally, state, federal or provincial imposition of net metering or RPS programs can make it more or less expensive for retail customers to supplement or replace their reliance on grid power. The Company **' s smart home services focus on transactions with residential customers, subjecting it to a variety of laws, regulations and licensing requirements governing interactions with residential consumers, including those pertaining to privacy and data security, consumer financial and credit transactions, home improvements, warranties and door- to- door solicitation. In certain jurisdictions, the Company is required to obtain licenses or permits to comply with standards governing marketing and sales efforts, installation of equipment or servicing of subscribers, and monitoring station employee selection and training. Increased regulation of matters relating to interactions with residential consumers could require modification to the Company' s home services operations and the incurrence of additional expenses. Further, any expansion of the scope of products or services into new markets may require additional licenses and expenditures to otherwise maintain compliance with additional laws, regulations or licensing requirements. These laws and regulations, as well as their interpretation, and any new laws, regulations or licensing requirements could negatively affect the Company' s ability to acquire new residential customers. Any of these measures could increase costs for providing, or reduce customer satisfaction with respect to, smart home services. The Federal Trade Commission (" FTC") and the Federal Communications Commission have issued regulations that restrict direct- to- home marketing, telemarketing, email marketing and other sales practices, including limitations on methods of communication, requirements to maintain a " do not call " list, cancellation rights and required training for personnel to comply with these restrictions. Any noncompliance, or alleged noncompliance, of applicable regulations by the Company, third- party vendors used for marketing, telemarketing or lead generation activities or independent, third- party authorized dealers of smart home services could result in private rights of actions or enforcement actions for civil or criminal penalties. Changes in regulations or interpretations that further restrict lead generating activities also could result in a reduction in the number of new smart home services customers. The Company' s smart home business exposes it to risks of liability for the acts or omissions of its employees, including with respect to sales practices. Activities in connection with sales efforts by employees, independent contractors, and other agents, including predatory door- to- door sales tactics and fraudulent misrepresentations, have in the past subjected it to, and could in the future subject the Company to, governmental investigations and class action lawsuits for, among others, false advertising and deceptive trade practice damage claims. Any litigation or regulatory proceedings resulting from such activities could adversely impact the Company' s business, financial condition, results of operations, and cash flows. The Company is subject to various risks in connection with Vivint Smart Home' s ongoing settlement administration process involving the FTC, and may be subject to FTC Actions in the future. In 2021, Vivint Smart Home entered into a settlement with the FTC where Vivint Smart Home paid a total of $ 20 million to the United States and agreed to implement various compliance- related measures. The settlement requires an initial assessment and thereafter biennial assessments by an independent third- party assessor of Vivint Smart Home' s compliance programs and for the assessor to provide a report to the FTC staff on ongoing compliance with the settlement. Although Vivint Smart Home took action to enhance its compliance programs, these and other measures that the Company may take in the future may not be successful. If any assessments identify deficiencies in the Company' s efforts to comply, and should the FTC determine that Vivint Smart Home is not in full compliance with the settlement, the FTC could take further action, such as seeking judicial remedies for any noncompliance, and Vivint Smart Home could be subject to additional sanctions and restrictions on its smart home operations. In addition, the filing of an application with the court for noncompliance with the settlement could lead to**

regulatory actions by other agencies or private litigation, which could impact Vivint Smart Home' s ability to obtain regulatory approvals necessary to carry out present or future plans and operations, and result in negative publicity. The Company ' s international operations are exposed to political and economic risks, commercial instability and events beyond the Company' s control in the countries in which it operates, which risks may negatively impact the Company' s business. The Company' s international operations depend on products manufactured, purchased and sold in the U. S. and internationally. In some cases, these countries have greater political and economic volatility and greater vulnerability to infrastructure ~~and~~ labor **, and supply chain** disruptions than in NRG' s other markets. Operating a business in a number of different regions and countries exposes the Company to a number of risks, including: **imposition of burdensome tariffs or quotas,** multiple and potentially conflicting laws, regulations and policies that are subject to change, imposition of currency restrictions on repatriation of earnings or other restraints, ~~imposition of burdensome tariffs or quotas,~~ national and international conflict, including terrorist acts and political and economic instability or civil unrest that may severely disrupt economic activity in affected countries **and result in increased cost** . The occurrence of one or more of these events may negatively impact the Company' s business, results of operations and financial condition. Risks Related to ~~the~~ Economic and Financial Market Conditions ~~,~~ and the Company' s Indebtedness NRG' s level of indebtedness could adversely affect its ability to raise additional capital to fund its operations or return capital to stockholders. It could also expose it to the risk of increased interest rates and limit its ability to react to changes in the economy or its industry. NRG' s substantial **amount of** debt could have negative consequences, including: • increasing NRG' s vulnerability to general economic and industry conditions; • requiring a substantial portion of NRG' s cash flow from operations ~~to~~ be ~~dedicated~~ **used** to **pay** ~~the payment of~~ principal and interest on its indebtedness, ~~therefore reducing~~ **which reduces** NRG' s ability to pay dividends or ~~to use its cash flow to~~ fund its operations, capital expenditures and future business opportunities; • limiting NRG' s ability to enter into long- term power sales or fuel purchases **,** which require credit support; • **adversely impacting NRG' s credit rating, which could increase borrowing costs; •** limiting NRG' s ability to obtain additional financing for working capital **,** including collateral postings, capital expenditures, debt service requirements, acquisitions and general corporate ~~or other~~ purposes; • limiting NRG' s ability to adjust to changing market conditions and placing it at a competitive disadvantage compared to its competitors **,** who **may** have less debt; and • exposing NRG to the risk of increased interest rates because certain of its borrowings are at variable rates of interest ~~, primarily through its Revolving Credit Facility~~ . The Company' s ~~credit documents~~ **debt agreements** contain financial and other restrictive covenants that may limit the Company' s ability to return capital to stockholders **, including by paying dividends,** or otherwise engage in activities that may be in its long- term best interests. NRG' s failure to comply with those covenants could result in an event of default which, if not cured or waived, could result in the acceleration of **such indebtedness, which in turn could cause a cross default to NRG' s other indebtedness. NRG' s assets and available cash balances may not be sufficient to fully repay** all **outstanding** ~~of the Company' s~~ indebtedness **if accelerated upon an event of default** . ~~The Company' s corporate credit~~ **If NRG is unable to repay, refinance, or restructure its indebtedness as required, or amend the covenants contained in those** ~~agreement~~ **agreements , the lenders or other creditors may be entitled to obtain a lien or institute foreclosure proceedings against its assets, which could have a material adverse effect on its business, results of operations and financial condition. In addition, the Company' s Revolving Credit Facility and sustainability- linked bonds** ~~includes~~ **include** a sustainability- linked metric ~~and sustainability- linked bonds~~ , which could result in increased interest expense ~~to~~ **for** the Company if the sustainability metrics set forth therein are not ~~met~~ **achieved** . Furthermore, financial and other restrictive covenants contained in any **subsidiary or** project level ~~subsidiary~~ debt may limit the ability of NRG to receive distributions from such subsidiary. In addition, NRG' s ability to arrange financing, either at the corporate level, a non- recourse project- level subsidiary or otherwise, and the costs of such capital ~~,~~ are dependent on numerous factors, including: general economic and capital market conditions ~~;~~ **,** credit availability from banks and other financial institutions ~~;~~ **,** investor confidence in NRG, its partners and the regional wholesale power markets ~~;~~ **,** NRG' s financial performance and the financial performance of its subsidiaries ~~;~~ **,** NRG' s level of indebtedness and compliance with covenants in debt agreements ~~;~~ **,** maintenance of acceptable credit ratings ~~;~~ **,** cash flow ~~;~~ and provisions of tax and securities laws that may impact raising capital **. NRG' s ability to meet its payment obligations under its debt agreements is dependent on its ability to generate significant cash flows or obtain additional capital in the future. This, to some extent, is subject to market, economic, financial, competitive, legislative, and regulatory factors as well as other factors that are beyond its control** . NRG may not be successful in obtaining additional capital for these or other reasons. The failure to obtain additional capital **on terms acceptable to NRG, or at all,** from time to time may have a material adverse effect on its business and operations. **NRG' s preferred stock is senior to its common stock, and a failure to pay dividends on its preferred stock will prohibit the payment of dividends on its common stock. NRG has outstanding 650, 000 shares of 10. 25 % Series A Fixed- Rate Reset Cumulative Redeemable Perpetual Preferred Stock, with a $ 1, 000 liquidation preference per share. The Series A Preferred Stock is senior to NRG' s common stock in right of payment of dividends and other distributions and could adversely affect NRG' s ability to declare or pay dividends or distributions on its common stock. In the event of NRG' s voluntary or involuntary liquidation, winding- up or dissolution, the holders of Series A Preferred Stock must receive their $ 1, 000 per share, plus accumulated but unpaid dividends, prior to any distributions to holder of common stock. NRG must be current on dividends payable to holders of Series A Preferred Stock before any dividends can be paid on its common stock. Whenever dividends on any shares of Series A Preferred Stock have not been declared and paid for the equivalent of three or more dividend payments, whether or not for consecutive dividend periods, the number of directors on the Company' s Board of Directors will be increased by two, and the holders of Series A Preferred Stock will have the right to elect two members of the Company' s Board of Directors to fill such newly created openings.** Adverse economic conditions could adversely affect NRG' s business, financial condition, results of operations and cash flows. Adverse economic conditions, including inflation, and declines in wholesale energy prices, partially resulting from adverse economic conditions, may impact NRG' s results of operations ~~. The breadth and depth of negative economic conditions may have a wide- ranging impact on the U. S. business environment. In addition~~ , **including by reducing** ~~adverse economic conditions also reduce~~ the demand for energy commodities ~~. Reduced demand from negative economic conditions continues to impact the key domestic wholesale energy markets NRG serves~~ . In general, economic and commodity market conditions will continue to impact NRG' s unhedged future energy margins, liquidity, earnings growth and overall financial condition **. Macroeconomic factors may also impact consumer spending, which could adversely affect the Company' s Smart Home services, and increase the Company' s costs for such products and services, which it may not be able to pass on to customers** . In addition, adverse economic conditions, declines in wholesale energy prices, reduced demand for energy and other factors may negatively impact the trading price of NRG' s common stock and impact forecasted cash flows, which may require NRG to evaluate its goodwill and other long- lived assets for impairment. Any such impairment could have a material impact on NRG' s financial condition. Goodwill and other intangible assets that NRG has recorded in connection with its acquisitions are subject to impairment evaluations and, as a result, the Company could be required to write off some or all of this goodwill and other intangible assets, which may adversely affect the Company' s financial condition and results of operations. Goodwill is not amortized but is reviewed annually or more frequently for impairment. Other intangibles are also reviewed at least annually or more frequently, if certain conditions exist, and are amortized. Any reduction in or impairment of the value of goodwill or other intangible assets will result in a charge against earnings, which could materially adversely affect NRG' s reported results of operations and financial position in future periods ~~. Public health threats or outbreaks of communicable diseases could have a material adverse effect on the Company' s operations and financial results. The Company may face risks related to public health threats or outbreaks of communicable diseases. A widespread healthcare crisis, such as an outbreak of a communicable disease, could adversely affect the global economy and the Company' s ability to conduct its business for an indefinite period of time. For example, the ongoing global COVID- 19 pandemic negatively impacted local and global economies, disrupted financial markets and international trade, resulted in increased unemployment levels and impacted local and global supply chains, all of which also negatively impacted the electricity industry and the Company' s business. Federal, state, and local governments have implemented, and may continue to implement, various mitigation measures, including travel restrictions, border closings, restrictions on public gatherings, shelter- in- place orders and limitations on business activities. Although the operations of the Company are considered an essential service, some of these measures may adversely impact the ability of NRG employees, contractors, suppliers, customers, and other business partners to conduct business activities. This could have a material adverse effect on the Company' s results of operations, financial condition, risk exposure and liquidity~~ . CAUTIONARY STATEMENT REGARDING FORWARD- LOOKING INFORMATION This Annual Report on Form 10- K of NRG Energy, Inc., or NRG or the Company, includes forward- looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or Exchange Act. The words" believes,"" projects,"" anticipates,"" plans,"" expects,"" intends,"" estimates,"" should,"" forecasts," ~~" plans"~~ and similar expressions are intended to identify forward- looking statements. These forward- looking statements involve known and unknown risks, uncertainties and other factors that may cause NRG' s actual results, performance and achievements, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward- looking statements. These factors, risks and uncertainties include the factors described under Item 1A — Risk Factors and the following: • Business uncertainties related to **NRG' s ability to integrate** the ~~acquisition~~ **operations** of Vivint **Smart Home with its own** ; • NRG' s ability to obtain and maintain retail market share; • General economic conditions, changes in the wholesale power and gas markets and fluctuations in the cost of fuel; • Volatile power and gas supply costs and demand for power and gas ~~; • Changes in law~~ , including ~~judicial and regulatory decisions~~ **the impacts of weather** ; • Hazards customary to the power production industry and power generation operations, such as fuel and electricity price volatility, unusual weather conditions, catastrophic weather- related or other damage to facilities, unscheduled generation outages, maintenance or repairs, unanticipated changes to fuel supply costs or availability due to higher demand, shortages, transportation problems or other developments, environmental incidents, or electric transmission or gas pipeline system constraints and the possibility that NRG may not have adequate insurance to cover losses as a result of such hazards; • The effectiveness of NRG' s risk management policies and procedures and the ability of NRG' s counterparties to satisfy their financial commitments; • NRG' s ability to enter into contracts to sell power or gas and procure fuel on acceptable terms and prices ~~; • NRG' s inability to estimate with any degree of certainty the future impact that COVID- 19, any resurgence of COVID- 19 or variants thereof, or other pandemic may have on NRG' s results of operations, financial position, risk exposure and liquidity~~ ; • NRG' s ability to successfully integrate, realize cost savings and manage any acquired businesses; • NRG' s ability to engage in successful acquisitions and divestitures, as well as other mergers and acquisitions activity; • Cyber terrorism and cybersecurity risks, data breaches or the occurrence of a catastrophic loss and the possibility that NRG may not have sufficient insurance to cover losses resulting from such hazards or the inability of NRG' s insurers to provide coverage; • Counterparties' collateral demands and other factors affecting NRG' s liquidity position and financial condition; • NRG' s ability to operate its businesses efficiently and generate earnings and cash flows from its asset- based businesses in relation to its debt and other obligations; • The liquidity and competitiveness of wholesale markets for energy commodities; • **Changes in law, including judicial and regulatory decisions; •** Government regulation, including changes in market rules, rates, tariffs and environmental laws; • NRG' s ability to develop and innovate new products, as retail and wholesale markets continue to change and evolve; • Price mitigation strategies and other market structures employed by ISOs or RTOs that result in a failure to adequately and fairly compensate NRG' s generation units; • NRG' s ability to mitigate forced outage risk; • NRG' s ability to borrow funds and access capital markets, as well as NRG' s substantial indebtedness and the possibility that NRG may incur additional indebtedness in the future; • Operating and financial restrictions placed on NRG and its subsidiaries that are contained in NRG' s corporate credit agreements, and in debt and other agreements of certain of NRG subsidiaries and project affiliates generally; • The ability of NRG and its counterparties to develop and build new power generation facilities; • NRG' s ability to implement its strategy of finding ways to meet the challenges of climate change, clean air and protecting natural resources, while taking advantage of business opportunities; • NRG' s ability to increase cash from operations through operational and market initiatives, corporate efficiencies, asset strategy, and a range of other programs throughout NRG to reduce costs or generate revenues; • NRG' s ability to successfully evaluate investments and achieve intended financial results in new business and growth initiatives; **and** • NRG' s ability to develop and maintain successful partnering relationships as needed. In addition, unlisted factors may present significant additional obstacles to the realization of forward- looking statements. Forward- looking statements speak only as of the date they were made and NRG undertakes no obligation to publicly update or revise any forward- looking statements, whether as a result of new information, future events or otherwise except as otherwise required by applicable laws. The foregoing factors that could cause NRG' s actual results to differ materially from those contemplated in any forward- looking statements included in this Annual Report on Form 10- K should not be construed as exhaustive.