

# TRANSACTIONS



## FERC'S ROE METHOD

IS REMANDED: WHAT'S NEXT?


An Examination of the CAPM Market Return Estimate

### The Rundown

Court remand of the Federal Energy Regulatory Commission's ("FERC") controversial Return on Equity ("ROE") methodology provides an opportunity to improve its approach, with the Capital Asset Pricing Model's ("CAPM") Market Return estimate being a clear candidate for reform.

**FERC's Market Return estimate**, with its sole reliance on short-term analyst earnings growth rates as part of the calculation, is illogical and renders the estimate unreliable and arguably grossly inflated. Reform of the method is required.

**Pending a Commission order addressing the remand**, ratepayers can take advantage of the pause, seek to achieve savings now and not later, and also greatly influence the Commission's view by putting forward a credible and justified position on ROE through challenging an existing ROE that forms part of their current wholesale rate or one that is newly requested by a utility.



FERC's new controversial ROE methodology has been recently remanded by the D.C. Circuit Court of Appeals. **In its August 2022 opinion, the court found that FERC's rationale for its about-face on the use of the Risk Premium method to be arbitrary and capricious.**<sup>1</sup> In its 2019 order for the Midcontinent ISO ROE

complaint, FERC at first forcefully rejected the method but then subsequently in its 2020 re-hearing order, FERC found that the method's deficiencies to be less problematic and adopted the method alongside the Discounted Cash Flow ("DCF") model and CAPM. The court found FERC's explanation for its use of these other models, and the inputs therein, to be sufficient.

While the court focused on the inadequacies of the Commission's position on the Risk Premium method, now that the orders are remanded, there is a clear opportunity for FERC to refine its broader approach to determining just and reasonable ROEs. One notable area that can be

2022 Q4



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—and—  
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**FEBRUARY 14**  
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improved is the manner in which FERC calculates the Market Return and Market Risk Premium estimates as part of the CAPM and bring it more in line with other reasonable third-party estimates. This is expected to produce more moderate CAPM based ROE estimates and in turn will put downward pressure on new ROE requests by a utility or make it clear that certain utilities' existing ROEs are excessive and warrant action by ratepayers to reduce the ROEs incorporated in their wholesale charges.

### HOW DOES FERC CALCULATE THE MARKET RETURN AND MARKET RISK PREMIUM?

In its Opinion 569 series of decisions (now remanded) which established FERC's new ROE approach, the Commission explained it will calculate the Market Return by applying a Discounted Cash Flow ("DCF") model to a dataset comprised of the dividend-paying companies in the S&P 500 index. The DCF method requires the identification of the dividend yield for every company in the sample together with an estimated earnings per share growth rate projection.<sup>2</sup> These two variables are added together to create a company by company Market Return estimate and these individual results are weighted by each company's respective market capitalization value to arrive at an overall weighted Market Return estimate.

To estimate the growth rate component of the equation, the Commission decided to ONLY utilize a short-term growth rate that specially covers the next 3-5 year period and it did not include any longer term growth rate projection. The Market Risk Premium is estimated by deducting the Risk-Free Rate from the Market Return. FERC measures the Risk-Free Rate using the six-month average 30-year Treasury bond yield.

### WHAT'S WRONG WITH THE COMMISSION'S APPROACH?



The omission of a long-term growth rate projection is a fatal error and renders the resulting estimate unreliable and arguably grossly inflated. It is well-established that all company earnings growth rates are constrained in the long run by the rate of growth in the economy as a whole. It is for this very reason that many experts have expressed the need to include a long-term



## THE BASICS

### EXPLANATION OF THE MARKET RETURN & MARKET RISK PREMIUM

The Market Return is intended to represent the expected return of the overall market and a stock market index is typically used as a representative sample for this purpose. The Market Return can be separated into two distinct aspects (1) the Risk-Free Rate, which can be measured using U.S. Treasury bond yields; and (2) the Market Risk Premium, which is the additional return investors require for taking on risk. The Market Risk Premium is not directly observable and can be estimated by first estimating the overall Market Return and then deducting the Risk-Free Rate from the Market Return. This is known as the implied Market Risk Premium method.

growth rate when applying the DCF method. Indeed, in addition to the use of the CAPM method in its broader framework, the Commission uses a separate DCF model, which is applied to a proxy group of electric utilities, and this model incorporates both short-term and long-term growth rates. It also runs counter to how established financial firms derive Market Return estimates with Bloomberg, for example, applying a model that converges analyst short-term forecasts to the long-term GDP growth rate over a period of 8-15 years.

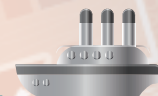
### COMPARISON TO OTHER MARKET RETURN/ RISK PREMIUM ESTIMATES

A straightforward approach to sense-check the (un)reasonableness of FERC's Market Return and the subsequent Market Risk Premium

component is to compare these estimates to other readily available third-party estimates. In the Exhibits below, we compare several different estimates over a series of specific intervals from November 2019 onwards, which was when FERC first made a determination regarding its preferred Market Return and Market Risk Premium methods. To measure the Market Risk Premium from these third-party estimates, we utilize FERC's approach of using the six-month average 30-year Treasury bond yield for the Risk-Free Rate.

*Figure 1* and *Figure 2* (on the following page) clearly demonstrate that FERC's estimates are significantly greater than the third-party estimates. It bears nothing that these third-party estimates of the Market Risk Premium are much more similar to the long-term historically measured market risk premium of 6% than the estimates produced when using the FERC method.

### HOW CAN FERC IMPROVE THE MARKET RETURN AND MARKET RISK PREMIUM ESTIMATES?



At a minimum, FERC can incorporate a long-term GDP growth rate as part of its S&P 500 DCF model. Moreover, the short-term and long-term growth rates should be weighted in accordance with FERC's long-standing policy until recently, of weighing the former at 2/3 and the latter at 1/3. This balance remains a conservatively high weight for the short-term rate.

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Figure 1. Market Return

	11/29/2019	2/28/2020	4/30/2020	8/31/2020	11/30/2020	2/26/2021	4/30/2021	12/30/2021	4/29/2022	6/30/2022
<b>FERC</b>	10.79%	10.79%	10.72%	11.05%	11.07%	12.23%	12.78%	13.73%	12.84%	13.08%
<b>Dr. Damodaran</b>	6.67%	6.90%	6.67%	5.72%	5.81%	5.95%	5.70%	6.41%	8.12%	8.71%
<b>Kroll</b>	8.50%	8.00%	9.00%	8.50%	8.50%	8.00%	8.00%	8.00%	8.50%	9.00%

Source: GDS Associates internal records, Damodaran Online, Kroll (Cost of Capital Resource Center)

Figure 2. Market Risk Premium

	11/29/2019	2/28/2020	4/30/2020	8/31/2020	11/30/2020	2/26/2021	4/30/2021	12/30/2021	4/29/2022	6/30/2022
<b>FERC</b>	8.48%	8.60%	8.80%	9.67%	9.61%	10.54%	10.82%	11.79%	10.61%	10.43%
<b>Dr. Damodaran</b>	4.36%	4.71%	4.75%	4.34%	4.35%	4.26%	3.74%	4.47%	5.89%	6.06%
<b>Kroll</b>	6.19%	5.81%	7.08%	7.12%	7.04%	6.31%	6.04%	6.06%	6.27%	6.35%
<b>KPMG</b>	6.00%	6.75%	6.50%	6.75%	6.25%	5.75%	5.50%	5.00%	5.50%	6.00%

Source: GDS Associates internal records, Damodaran Online, Kroll (Cost of Capital Resource Center) KPMG (Equity Market Risk Premium - Research Summary, Sep. 30, 2022)

The Commission should also consider the inclusion of a Market Risk Premium that is derived from historical data, which is an approach many financial firms (e.g. MorningStar) and federal agencies rely upon.



## HOW DOES THIS IMPROVEMENT IMPACT CAPM RESULTS?

The inclusion of a long-term GDS growth rate as part of the FERC calculation, as described above, would reduce a mid-year 2022 Market Return estimate from 13.08% to 11.20%. Correspondingly, the Market Risk Premium would decline from 10.43% to 8.55%. These revised values remain substantially greater than other third-party estimates, but such a revision provides an important step in the right direction. Further refinements to the estimation approach may be warranted.

Using this reduced Market Return estimate as part of the Commission CAPM model (and making no other changes) would lower the median CAPM from around 12.00% to 10.3% and, in turn, significantly push down the overall ROE that FERC would find just and reasonable.

## WHAT AVENUES ARE AVAILABLE TO ENSURE JUST AND REASONABLE ROEs?



While we wait for FERC to respond to the court's remand, the opportunity remains for ratepayers to pursue lower ROEs, through challenging an existing ROE that forms part of their current wholesale rate or one that is newly requested by a utility. It is highly recommended that ratepayers assess whether

existing or newly proposed ROEs are excessive and to seek remedial action when necessary. Otherwise, ratepayers will be paying rates that are simply too high. Additionally, through participating in formal FERC proceedings, ratepayers can seek to directly influence the Commission's new methodology by putting forward a credible and justified positions on ROE that will have a long lasting impact.

GDS Associates has been helping ratepayers navigate the recent period of FERC ROE flux and has assisted with securing lower ROEs through complaint filings and subsequent settlement negotiations. These efforts have led to significant costs savings for ratepayers. The GDS Associates cost of capital team stands ready to advise and work with you to achieve just and reasonable ROEs. ■

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### References

- <sup>1</sup> The court's opinion does not prohibit the FERC from addressing the court's concerns regarding its explanation for relying on the Risk Premium method and subsequently relying on the method.
- <sup>2</sup> This is used as a proxy for the growth rate of dividends.



# FUNDING

for

# Grid Resilience

**The federal government calls the Bipartisan Infrastructure Law (BIL), a.k.a. Infrastructure Investment and Jobs Act (IIJA), a once-in-a-lifetime investment for a good reason.** This 2021

law provides a multi-billion-dollar opportunity for states and utilities, regardless of size, to capture federal funds and use them for investments in grid reliability including efforts to reduce outages related to climate-induced events. Funds will be released in blocks focusing on various aspects of electric utility grid operations.

**Electric Power Grid Resilience** has become the federal government's key infrastructure improvement focus. *Part of the new BIL initiative is rooted in the federal government's desire to prepare the country to withstand more frequent and damaging weather-related events.* Another aspect is meant to reduce the negative impacts of those events on residents and businesses. The federal government expects at least 40% of the electric infrastructure investments to be devoted to improving service amongst the most disadvantaged communities across the country.

**NEVI FUNDS.** Several blocks of funds have already been announced. Some are of particular interest to the electricity sector. The first block of funds was released for the National

Electric Vehicle Infrastructure Formula Program ("NEVI Formula"). This block is the most significant of all the funding programs and is typically managed by state departments of transportation in coordination with state energy offices. About 85% of all IIJA funds to states will go to this infrastructure modernization program.

The NEVI Formula allows for \$1 billion per year for five years to fund eligible entities, including states, metropolitan planning organizations, local governments, political subdivisions, and tribal governments through formula grants. The goal is to strategically deploy electric vehicle (EV) charging infrastructure and establish an interconnected network of EV charging facilities that will facilitate data collection and increase customer access and reliability of the EV charging network. Funding for this initiative is only provided to government

## These newly available funds provide benefits to both utilities and governments:

- 01** Governments, from state to local, can leverage the funds to address systemic deficiencies and inequalities while setting up new economic development in their jurisdictions.
- 02** The infrastructure improvements, particularly electric vehicle loads, will create load growth for utilities.
- 03** The infrastructure improvements will also help provide incentives for clean energy production and energy efficiency, participation that will help the nation with its climate goals.
- 04** Many competitive grants are not reimbursable to the government, meaning that tax-payer money is used to improve electricity reliability. This government investment reinforces why there is a minimum target of 40% for improvements in disadvantaged communities and slow-growth rural areas.
- 05** When matching funds are required, they may frequently be found from operations and maintenance improvement projects already in the utility or energy provider's plan.
- 06** Many of the funding opportunities are synergistic. With some innovation, eligible parties working together may be able to get results that exceed what they would get going at it alone.

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entities (grantees), so they pay for up to eighty percent of the cost of installing an EV charging station. That pot of money will go to the operators of the charging stations (subgrantees).

Most of the expected subgrant recipients will be private companies already in the transportation fuel business. Utilities will play a significant role in the program's success. After years of flat growth, thanks to efficiency, the transformation of the transportation sector will lead to new load growth for the incumbent utilities. The federal government created the Joint Office of Transportation and Energy to manage the NEVI Formula program. More details may be found at <https://driveelectric.gov/>.

The second collection of funding opportunities is more specific to the electricity sector. *\$47.2 Billion in government funds will be allocated to improvements in critical infrastructure cybersecurity to address critical infrastructure needs, waste management, flood and wildfire mitigation, drought, and coastal resiliency, ecosystem restoration, heat stress, and weatherization.* This block of funds is explicitly allocated for electric grid resiliency. Examples of portions of interest to electricity operations include:

**Preventing Outages and Enhancing the Resilience of the Electric Grid (IIJA 40101):** This section of the law attempts to reduce events in which electric grid operations are disrupted, preventively shut off, or cannot operate safely due to extreme weather, wildfire, or a natural disaster. There is \$5 Billion in funding available for outage prevention. Most of these funds will be managed by state energy offices and tribal governments (grantees) as formula grants, but to get the funds, the grantee must provide a fifteen percent match. Up to 95% of state grants will flow down as subgrants to eligible entities (subgrantees). While large investor-owned utilities will need to provide a 1:1 match to get the non-reimbursable funds, small IOUs, cooperative and municipal utilities selling less than 4 TWh of electricity per year will only need a 33% match to receive the grants. In states that cannot come up with their fifteen percent match, they will likely seek equivalent money by increasing the subgrantee match.

States and tribal governments can receive funds annually for five years. They will be required to manage implementation, which can extend past

the five-year funding horizon. DOE allows these grantees to apply for the first two years in their first request. This two-for-one approach is meant to accelerate deployment and provide certainties to utilities that the funds are allocated.

Some projects eligible for this grant include vegetation management, pole replacement, reconductoring, hardening of power facilities, and many other measures to prevent outages. Most utilities should have little trouble with the matching funds given that these preventive maintenance measures are likely already in the operating plans for the 5-year grant cycle that starts in 2022 and ends in 2027. Once funded, projects can be completed in up to ten years.

**Upgrading Our Electric Grid and Ensuring Reliability and Resiliency IIJA Section 40101(c) and Electric Grid Reliability and Resilience Research, Development, and Demonstration -IIJA Section 40103.** This section provides another \$5 Billion in federal funds to establish a competitive grant program that supports research and development related to electric grid resiliency and reliability. The purpose of 40103 is for eligible entities to "coordinate and collaborate with electric sector owners and operators."

This funding set is for competitive grants for eligible parties, excluding states and Indian Tribes. Utilities should pay close attention to these two sections of IIJA because they represent different opportunities. Although utilities can't apply both funds to pay for a high-cost project, the vast needs for infrastructure modernization allow interested utilities to seek these non-reimbursable funds for different projects.

**Deployment of Technologies to Enhance Grid Flexibility (IIJA Section 40107):** This section also provides another \$5 Billion in federal funding and is the evolution of the existing Smart Grid Investment Grant (SGIG) program. The SGIG program, established by the Energy Independence and Security Act (EISA) of 2007, provides up to 50% of the eligible costs for qualifying electricity provider system-upgrade projects selected on a competitive basis. The new law allocates additional funding to get to the \$5 Billion level.

The sections on the Program Upgrading Our Electric Grid and Ensuring Reliability and Resiliency and

**\$47.2 Billion in government funds will be allocated to improvements in critical infrastructure cybersecurity to address critical infrastructure needs, waste management, flood and wildfire mitigation, drought, and coastal resiliency, ecosystem restoration, heat stress, and weatherization**

Deployment of Technologies to Enhance Grid Flexibility/Smart Grid Investment Matching Grant Program continue the focus on grid resilience. These sections were announced during the first week of September as requests for information (RFI) which allowed parties to participate in the design of these programs. These three programs will be called the Grid Resilience and Innovative Partnership, or GRIP. The hope is to maximize the synergies, benefits, and impacts of the three programs, supporting the development of more comprehensive and regional resilience strategies. The GRIP programs will be announced in January 2023 after feedback is collected and will likely be competitive grants. Typically, entities eligible to receive grants include electric grid operators, electricity storage operators, electricity generators, transmission owners or operators, distribution providers, fuel suppliers or other relevant entities that may help reduce disruptive events.

Utilities and state governments should focus on and target one or several of these synergistic programs. For example, the "Update Energy Modeling Capabilities through Building Electrification" section is still under development, and presents opportunities for innovation and better data analytics. There is much more to learn from the law, as with the rest of IIJA.

**A CALL TO ACTION.** State governments receive guidance from the DOE national labs to help them grasp the opportunities at their doorstep. The path for utilities is less straightforward.

One approach is to hone in on one funding opportunity and get guidance from the state on how to pursue the funds. Each state is developing requests for proposals (RFPs) or calls to projects (CP) to be released in the first or second quarter of

2023. Each state will have the inherent terms and conditions they used in the past. If a utility has worked with a state energy office, it will be familiar with most of that contract language. The new portion of the RFP will reflect the outcome of the conversations they had with state utility trade associations and the utilities themselves. Any utility that has not been a part of that conversation should reach out to their state energy office as soon as possible.

Pooling resources to research the grant and submit persuasive RFP responses may prove more cost-effective. So, another approach is to look for synergies with neighboring utilities or between utilities and their G&T business partners. This approach is especially true for the smaller cooperative and municipal utilities because the opportunity cost of applying for a grant may exceed the value of the gift. This approach is also valid for large operators with a common interest in upgrading facilities that are not owned by them but affect the grid's reliability.

Finally, a third approach is to look at all the pots of money and understand the intention behind them. Utilities with a broader view of reliability and investments over time may want to explore ways to capture as much free federal dollars as possible to improve the service in their territories. At GDS, we would be delighted to partake in that conversation and help utilities keep track of the opportunities. ■

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