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Office of Utilities Regulation

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**Amendments  
to  
Electricity Disaster Fund  
Rules of Procedure  
for  
Operation and Administration**

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**Determination Notice**

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**OFFICE OF UTILITIES REGULATION**

February 2009

**DOCUMENT TITLE AND APPROVAL PAGE**

**DOCUMENT NUMBER:** Ele 2009/02: Det/02

**DOCUMENT TITLE:** Amendments to Electricity Disaster Fund Rules of Procedure for Operation and Administration - Determination Notice

**1. PURPOSE OF DOCUMENT**

This document sets out the Office's Determination with respect to changes to the Electricity Disaster Fund Rules.

**APPROVAL**

This Document is approved by the Office of Utilities Regulation and the Determinations therein become effective on February 2, 2009.

On behalf of the Office:



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George C. Wilson  
**Director General (Acting)**  
February 2, 2009

## **Abstract**

The Electricity Disaster Fund Rules of Procedure became effective on August 1, 2008. Among the features in the rules is a provision for a deductible on claims against the Fund equivalent to 0.5% of Net Book Value (NBV) of its transmission and distribution (T&D) assets.

Following the publication of the Rules JPS registered an objection to the level and application of the deductible. As such the Office of Utilities (OUR) undertook a review of this provision.

In addition, in the processing of recent claims two other issues have emerged with respect to the Fund:

1. the treatment of opportunity costs when there are delays in the processing of the Claim;
2. the need for provision to address the engagement of Loss Adjusters and the payment for their services from the Fund.

After a thorough review of the issues the Office made its determination keeping in focus the principles of efficiency, fairness and prudence.

The decisions and the rationale that guided them are set out in this Determination.

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## **1.0 Introduction**

The Electricity Disaster Fund Rules of Procedure took effect on August 1, 2008. In response the Jamaica Public Service Company Limited (JPS) has submitted an objection to the 0.5% deductible linked to the Net Book Value (NBV) of its Transmission and Distribution (T&D) assets.

In addition, two other issues have emerged with respect to the Fund. These are:

1. the treatment of opportunity costs when there are delays in the processing of the Claim;
2. the need for provision to address the engagement of Loss Adjusters and the payment for their services from the Fund.

It is worth noting that all of the above issues represent aspects to the processing of claims. Indeed, the recognition for modifications to the Rules has come out of the insights gained in handling the 2005 and the 2007 hurricane claims.

This Determination Notice therefore examines each of the issues and outlines the rationale for the decision taken. The Office is of the view that adjustments to the Rules examined herein will go a long way in enhancement of the administration of the Fund.

## **2.0 The Deductible**

The objection raised by JPS against the 0.5% deductible was made on the grounds that:

- ◆ the level of the deductible threshold is too high
- ◆ multiple claims within a year could amass to huge financial losses
- ◆ the introduction of the deductible amounts to regulatory inconsistency

Against this background the Office of Utilities Regulation (OUR) has found it necessary to review the level and application of the deductible as well as clarify the main issues raised in the objection. This response is delineated in this section.

## 2.1 The Z-Factor

### 2.1.1 Interpretation

Under Schedule 3, Exhibit 1 of the **All Island Electricity Licence, 2001** provision is made in the Performance Based Rate-making Mechanism (PBRM) for a Z-factor. This factor, according to the Licence, *“is the allowed percentage increase in the price cap index due to events that:*

- a) affect the Licensee’s costs;*
- b) are not due to the Licensee’s managerial decisions; and*
- c) are not captured by other elements of the price cap mechanism”*

As such, the Z-factor is intended to capture the effects of exogenous variables that may materially affect the cost of the Licensee and thus impair the company’s profitability. The Licence recognizes that unexpected government obligations may be one such source and allows for its treatment in the price mechanism for cost above a *2001 inflation-indexed threshold* of \$10 million.

When JPS was granted the licence in 2001 it was presumed that costs associated with disasters would be covered under its normal insurance expenditure which falls within the framework of the non-fuel component the tariff. Disasters are random, but expected events hence they are viewed as manageable risks. Consequently, disaster expenditure was not initially contemplated as an item to be treated under the Z-factor provision.

### 2.1.2 Electricity Disaster Fund

In the 2004 Tariff Adjustments Submission JPS proposed the establishment of a Self-insurance Fund on the grounds that the rise in the incidence of damage caused by hurricanes and flood rains had made it difficult and expensive to secure insurance for its T&D lines. Insurance, where available in the Northern Caribbean, were offered<sup>1</sup>:

- a) at premiums between 15% to 20% of the sum insured;
- b) with deductibles of 5% to 10% of the sum insured.

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<sup>1</sup> See JPS Rate Submission 2004, page 68

Evidently, if JPS had accepted coverage on the terms offered by insurers, consumers would see relatively higher tariff rates and should a disaster occur JPS would not qualify for compensation from the insurers if the damage to the T&D system is less than US\$11.6 million<sup>2</sup>.

It was in this context that the Office ruled that the proposal was sound and gave its approval for the establishment of the Electricity Disaster Fund (Fund) in June 2004.

Only three months after the introduction of the Fund the island was severely affected by Hurricane Ivan. As a result, JPS filed a Z-factor claim for \$1,431 million for hurricane damages as a part of its 2005 Annual Tariff Adjustment Submission.

While the OUR recognized that the claim should have been correctly filed against the Electricity Disaster Fund, approval was given for a compensation of \$457 million under the Z-factor provision because:

- although the establishment of the Fund had placed the item within the price cap mechanism the accumulated sum in the Fund was less than 5% of the claim;
- the event had impacted the Licensee's cost;
- the event was not due to the Licensee's managerial decision

It should be noted that had the company secured insurance for its T&D assets under no circumstances would such a claim be entertained by the Office.

### **2.1.3 Moral Hazards**

As stated in the ***Electricity Disaster Fund Rules of Procedure (2008)***;

*“Moral hazard arises when an institution or individual behaves in a manner that is less careful than would have been the case if it (or he) were required to bear the full consequences of its (his) actions. As such, in the case of insurance there is the tendency for the insured, with more information than the insurer, to behave in a manner that increases the degree of their vulnerability to disaster. This in turn increases the cost of payments for damages to the insurer.”*

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<sup>2</sup> Assuming full coverage of the T&D assets in 2004 and a 5% deductible, since the average NBV of the T&D assets and the average exchange rate in 2004 were J\$14,213.7million and J\$61.34:US\$1 respectively.

A deductible therefore represents an effort by the insurer to eliminate costs which may arise as a result of negligence or willfulness on the part of the insured. As such a deductible is interpreted by the insurer as a cost within the control of management.

In objecting to the deductible JPS asserted that:

*“if the Fund does not address claims for damages of less than US\$1.5 million (the current deductible threshold), it would stand to reason that the Company’s only resort would be to file such claims under the Z-factor clause of the Licence, provided they exceed the \$13 million inflation adjusted **de minimis** threshold<sup>3</sup>.”*

Consequently, while JPS would be in its right to submit a claim for deductibles not recognized under the rules of the Fund, such a claim would be thrown out under the Z-factor provision on the grounds that:

- a) the Office has an obligation to protect the Fund from moral hazards and such considers it prudent to incorporate the best practice of the insurance industry within the administration thereof;
- b) A deductible is an imputed cost associated with moral hazards and as such reflects a cost to the insured that are deemed to be within management’s control and therefore avoidable.

To accommodate the payment of this component of a claim under the Z-factor clause after it was denied under the rules of the Fund would represent a dereliction of duty as per the OUR Act and a failure to observe completely the conditions specified for the activation of the Z-factor provision.

## 2.2 The Sum Insured

Although it was not the main thrust of JPS’ objection, it pointed out that “the ‘sum insured’ is very different from the NBV”. The Office believes for the purpose of clarification it is worthwhile to note that JPS is correct in stating that the concepts are different. However, by virtue of the fact that the ‘sum insured’ represents the agreed value at which the insurer will indemnify the assets of the insured it stands to reason that the ‘sum insured’ is often stated as a proportion of the NBV.

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<sup>3</sup> The same as the previously mentioned *2001 Inflation-Indexed Threshold* of \$10 million



With respect to the Fund the Office assumes that the 'sum insured' is equivalent to the upper limit of the Fund, which in turn is a percentage of the NBV of the T&D assets<sup>4</sup>. Consequently, it seems perfectly plausible that the NBV be seen as point of reference for the deductible threshold.

## 2.3 Inconsistency in Determinations

When the Office gave approval for the establishment of the Fund it was with the clear understanding that formal rules would have to be established for its management. After much research and adhering to process of consultation with key stakeholders including, JPS, the private sector, a consumer group and the relevant ministry, the rules were put into effect on August 1, 2008.

It is true that a deductible was not applied to the Hurricane Ivan (2004) Claim and in the **Annual Tariff Adjustment 2006 Determination** the Office committed itself to applying the same principles employed in the Hurricane Ivan case to the 2005 disasters. However, to suggest that the Office is inconsistent in its application of regulation by virtue of the fact that the rules now contain a deductible clause reflects a failure to grasp the progressive nature of regulation.

The regulatory process must have the capacity to adapt prudently to new information and new situations if it is to be effective. The objectives of the Fund are to:

- reduce uncertainty with respect to the funding of restoration activities in the event of a natural disaster;
- facilitate a framework within which restoration activities may be effected efficiently and in the shortest possible time;
- minimise the financial impact on rate-payers since they may be required to pay higher rates in the aftermath of a natural disaster.

In this regard, while the Office sees the Fund as a resource to enable efficient and timely restoration of electricity supply after a disaster it is also critical that rules governing the Fund should not allow for price increases to consumers arising from moral hazards associated with the utility's behaviour. The inclusion of a deductible was therefore crucial to robustness of the rules.

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<sup>4</sup> The Fund is capped at 15% of the NBV of the T&D assets.

## 2.4 Adverse Effect on Risk/Reward Profile

The issue of whether there should be a deductible has been answered above. However, the question of the level of the deductible and its application in cases of multiple disasters within a financial year merits examination.

### 2.4.1 The Level of the Deductible

It should be noted that the 5% to 10% deductible range stated was used in the context of insurance for T&D assets which is the exclusive focus of the Fund. It is not intended to be interpreted as the deductible range for all classes of electric utility assets regardless of function. Therefore, to juxtapose the 1.5% to 3.0% deductible limits for generation assets, as JPS did in its objection, against the 5% to 10% T&D threshold is fallacious.

Deductible thresholds are positively correlated to the risk profile of the assets. As such, given the vulnerability of the T&D assets to tropical cyclones and flooding the deductible thresholds associated with reasonable premiums are naturally higher than those applicable to generation plants.

Moreover, the 5% to 10% deductible alluded to as the industry norm (for T&D sum insured in the hurricane-belt) is in fact a quotation from the ***JPS Rate Submission 2004***<sup>5</sup>, which coincides with our own investigation and was presumably the result of the Company's due-diligence exercise in the presentation of its case for the establishment of the Fund

However, while industry norm is an important guide a more relevant question here is, "What is reasonable given the peculiarities of the Fund and the risks involved?"

Deductibles are not aimed at lowering the profitability of the insured but rather it targets negligence and irresponsible tendencies on the part of the insured that may result in an unwarranted increase cost to the insurer (or in this case the Fund). Therefore deductibles should not be financially punitive but be set at a level that discourages any perverse inclinations with respect to the Company's maintenance and expansion of the T&D network that creates an external cost.

The Office is cognizant that while there is a need to have in place a mechanism that discourages moral hazards such a provision should not put undue burden on the company's profitability if and when a disaster occurs. In reviewing the level of the deductible, the Office has formed that view that whereas, the 0.5% would be

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<sup>5</sup> See Electricity Disaster Fund Rules of Procedure, page 9

acceptable in the absence of proper regulatory monitoring there is room for applying a lower figure where this is not the case. In this regard the Office has taken note of the fact that the Rules place significant emphasis on a sound disaster preparation programme and proper maintenance practices which potentially should mitigate the risk associated with moral hazards. Against this background, the Office believes there is a basis for accommodating a lower level of deductible. Consequently, the Office has determined that the level of the deductible can be reduced from 0.5% to 0.25%.

#### **2.4.2 Materiality & Moral Hazards**

JPS in its objection suggests that the deductible threshold should be the *2001 Inflation-Indexed Threshold* of \$10 million associated with government obligation referred to in Section 5 of Schedule 3 of the Licence. There is however a need to understand the difference between the principle that informs the deductible from idea behind the government obligation threshold. The objective of the former is a moral check while that of the latter is clearly an issue of materiality. Indeed, Section 5.2 of the above-mentioned Schedule asserts:

*“A Government Imposed Obligation shall be deemed material only if the annual incremental costs or savings to the Licensee that result therefrom amount to at least \$10 million adjusted annually for Jamaican inflation from the date of the Licence.”*

The Office therefore repudiates the connection that is being made between the two thresholds. The fact is that both are informed by divergent principles and as such one cannot be used as a basis to determine the other. The setting of the level of the deductible must be established on the basis of what is deemed to be prudent with respect to the danger of moral hazards rather than on the basis of materiality.

#### **2.4.3 Deductible Linked to the size of the Claim**

Although objecting to the deductible higher than the *2001 Inflation-Indexed Threshold* of \$10 million JPS floated for consideration, a formula that would have the deductible set at 1.5% to 3.0% of the claim. This means that the actual size of the deductible would vary depending on the value of the claim.

Deductibles tied to the value of claims do exist in the insurance industry but they are not typical of what obtains for hurricane insurance. The rationale for the deductible in the Rules is predicated on the idea of a basic level of maintenance annually that is consistent with the size of the T&D system. If this maintenance is not done, in the event of a disaster, the damage to the system is likely to be more

than proportional to the scale and impact of the event. Therefore, by linking the deductible to the claim rather than the T&D assets the Office would be making the Fund susceptible to higher than warranted payouts, in the absence of a basic level of maintenance.

In addition, a deductible linked to the NBV has the advantages of being simple, transparent and insulated from any kind of manipulation on the part of the insured, hence, the preference for this kind of formula.

#### **2.4.4 Deductible in the event of Multiple Claims**

To date, even in a year of multiple disasters, such as 2005<sup>6</sup>, JPS submitted a single claim. This would suggest that the cumulative sum arising from multiple events on a single claim would be subject to the prescribed deductible.

Notwithstanding, the Rules in its present form requires the timely and efficient submission of claims. This implies that if multiple disasters occur in a relatively short period of time it is possible that several claims be submitted in a single year. Consequently, JPS' depiction of a scenario with multiple deductibles in a single year is not unrealistic. Therefore, if there are multiple claims in one year with a deductible applied to each, this could have severe negative financial implications for the Company. Furthermore, in deciding to cut the deductible level in half, the Office has tied it to actively monitoring the company's annual T&D maintenance programme. As such, it seems only logical that the deductible be applied once in any given year.

## **2.5 Conclusions**

1. The Licence implicitly assumes that costs associated with insurance against disasters are captured in the PBRM. Therefore it was never envisaged that the Z-factor would be employed to meet such contingencies.
2. The Electricity Disaster Fund has been established as a substitute for traditional insurance which is no longer available to JPS at affordable premiums. As such, except under the circumstances specified in the Electricity Disaster Fund Rules, the Z-factor cannot be used to meet expenses originating from disasters.

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<sup>6</sup> Hurricanes Dennis, Emily and Wilma resulted in severe weather conditions on the island in 2005.

3. In relation to the operation and administration of the Fund, the sum insured is deemed to be equivalent to the upper limit of the Fund which is a function of the NBV; consequently the critical variables associated with the Fund are therefore linked to the NBV.
4. It is imperative that a distinction be made between inconsistency in regulation and progressive regulation. The former relates to arbitrariness in regulatory decision-making, the latter refers to well reasoned adjustments to the over-sight process consistent with the mandate of the regulatory authority and the benefit of experience.
5. There is no basis for making the deductible equivalent to the sum of the 2001 inflation-indexed threshold since the underlying bases upon which they anchored are different. The deductible is to reduce moral hazards while the 2001 inflation-indexed threshold is guided by the notion of costs that are material.
6. Provided that the information gap can be narrowed by the timely provision of the data requirement specified in Part 2 of the Electricity Disaster Fund the deductible should be 0.25%. However, if in any given year JPS fails to satisfy this condition the existing 0.5% deductible should be applied. The Rules should be amended to reflect this.
7. In the event of multiple disasters within a single year the deductible would be financially punitive if applied to each claim. This was never intended by the Rules. As such the Rules should allow for the application of the deductible on an annual basis.

### **3.0 The Application of Opportunity Costs**

The Office recognizes that funds used by JPS in the restoration of service in the aftermath of a disaster could have been used otherwise to generate a return. As such, the Company should be compensated for the opportunity cost associated with such funds.

The Office, on the other hand, is aware that opportunity cost is a function of time. Consequently, unwarranted delays on the part of JPS caused, among other things by:

- a) late submissions of claims by JPS;
- b) tardiness in presenting data required for the verification of claims

- c) procrastination with respect to engaging an auditor after direction is given by the Office or the unpunctual submission of the auditor's report;

can all lead to unnecessary increases in the opportunity cost which ultimately translates to higher tariffs for electricity consumers. Consequently, to safeguard the Fund against these inefficiencies the Office believes that, in such instances, the clock for computing the opportunity cost should be stopped as soon it is recognized by the regulator. In addition, the clock should only be restarted when the Office is confident the conditions associated with the processing of the claim are once again normal.

#### **4.0 Payment of the Loss Adjuster**

While the Rules clearly indicate that audits of the Fund should be paid out of the Fund, it fails to state where payments for the processing of claims either by a Loss Adjuster or an auditor would come from. This is a deficiency which should be addressed.

The Office is of the view that the involvement of a Loss Adjuster or an auditor is critical to the integrity and credibility of the claim-processing exercise. Without an independent evaluation of a claim by qualified professionals there is always the potential for higher compensation payouts. Therefore strictly from a cost-benefit rationale, it is reasonable that independent assessors be employed and be paid from the Fund.

#### **5.0 Determination**

Consistent with efficient and prudent administration of the Electricity Disaster Fund the Office has determined that:

1. the existing level of the deductible threshold of 0.5% shall to be lowered to 0.25%. Proper monitoring of JPS' T&D maintenance can narrow the information gap and the degree of moral hazards, which is the reason behind establishing a deductible in the first place.
2. the deductible shall be applicable only to the first Claim qualified for compensation in any one calendar year. A deductible shall not be applied to the compensation of any additional Claim made within the same calendar year.

3. in instances where there is clear evidence of unwarranted delays by JPS as it relates to the processing of a claim, the Office after issuing due warning to JPS shall stop the clock for the computation of opportunity cost. In addition, the clock shall only be restarted after the Office is satisfied that the source of the delay has been removed.
4. Payments for the processing of a claim by an auditor, loss adjustor or independent professional contracted to do so by, or with the Office's approval, shall be paid for out of the Fund.

Accordingly, the relevant sections of the Electricity Disaster Fund Rules shall be amended to reflect this determination.