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Office of Utilities Regulation

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**RECONSIDERATION OF THE OFFICE'S  
DECISION ON "NATIONAL WATER  
COMMISSION'S REVIEW OF RATES" –**

**DETERMINATION NOTICE NO. WAT 2008/01**

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**RECONSIDERATION NOTICE**

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**OFFICE OF UTILITIES REGULATION**

May 27, 2008

National Water Commission  
Reconsideration Notice of Document No. WAT 2008/01  
Document No. Wat 2008/02: RCN/01  
Office of Utilities Regulation

**DOCUMENT TITLE AND APPROVAL PAGE**

**DOCUMENT NUMBER: Wat 2008/02 : RCN/01**

**DOCUMENT TITLE:** Reconsideration of the Office's Decision on National Water Commission's Review of Rates - Determination Notice April 28, 2008

**1. PURPOSE OF DOCUMENT**

This Document outlines the Office's decision on the request for reconsideration brought forward by the NWC which regard to the decisions made in the April 28, 2008 Decision Notice.

**RECORD OF REVISIONS**

Revision Number	Description	Date
-	-	-

**APPROVAL**

This Document is approved by the Office of Utilities Regulation and the Decisions therein become effective **May 27<sup>th</sup> 2008.**

On behalf of the Office:



J Paul Morgan  
**Director General**

May 27, 2008

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## **Chapter 1: Office Summary of Responses**

### **Introduction**

The matter for a reconsideration of Determination Notice WAT 2008/01 – Review of Rates for the National Water Commission - came before the Office of Utilities Regulation on May 12<sup>th</sup> 2008. The reconsideration request contains requests for changes to provisions for certain costs decided upon by the Office, as well as changes to a number of Quality of Service Standards.

The NWC, in responding to the Determination Notice, has expressed the view and provided arguments in support that certain requirements imposed by the Office will be difficult to achieve.

The Office has examined the issues raised by the Commission, set out in this Reconsideration are responses to each of the issues raised by the NWC.

### **As it regards to the reconsideration of costs the Office has decided that:**

1. The reduction in the Administration Expense to \$1.605M is considered to be generous and therefore, the proposed \$1.692 by the NWC has been denied by the Office.
2. As it regards to interest expense on the non- contributory pension, the Office is not questioning the appropriateness of the recording of the item. The Office is of the view that this amount would provide additional cash for NWC without it being used to defray pension liabilities. Thus, employee's cost remains the same, as stated in the determination notice.
3. As regards to section 5.16 in the determination notice. The Electricity cost determined by the Office remains at \$3.5B. The Office has objected to increasing such cost.
4. The request to include foreign exchange loss as a cost to NWC does not meet the standard test of "known and measurable, at the time of setting the tariff ". The Office upholds the decision made in the original determination notice(section 5.19)
5. The revenue requirement remains as is stated in the Determination Notice and was not revised upwards (Section 8.12).
6. The Office has decided that the rate structure remains as is. The 7% X-Factor will be implemented in 2010, which is in the second year of the K-Factor regime.
7. The Office believes that 5% bad debt is a realistic figure. Thus, this decision remains the same as in section 10.1.4 of the Determination Notice.

**As it relates to the service standards the Office has made the following decisions.**

8. As it relates to the request that all claims by customers are to be submitted in writing, the Office disagrees with this request.
9. The Office agrees with NWC as regard to WGS 8. This standard has been revised and a maximum time of 35 working days is now being allowed to verify, repair or replace meters after being informed of defect.
10. The Office upholds its decision of WGS11. The decision remains the same as in the Determination Notice.
11. The Office has revised the timeframe for the NWC to restore itself to 85% functioning meters to within 24 months of the Determination Notice.
12. The Office maintains that there should be a maximum of 2 months between each meter reading and between bill issuances as per WGS10.

## **Chapter 2 : Detailed Responses**

The Office of Utilities Regulation (OUR) has a duty, among other things, to determine rates charged by service providers, technical and quality of service standards such that the best interest of customers, investors, and the service provider are met. It is based on this premise that the Request for Reconsideration submitted by the national Water Commission has been considered.

### **A. Responses to Reconsideration Request as it relates to cost justification**

#### **1. NWC's Request**

##### Administration expense

*The OUR provided \$1,606.971 in the determination for the 2007/08 Administration Expense, which is some \$85.4M less than NWC budgeted amount of \$1,692,330M. Based on the need in areas such as rental, security services and insurance, we believe that the amount provided in our budget is appropriate.*

##### Office's Comments

The reduction in administration expense is as a result of a reduction in the provisions for bad debt from \$689M to \$603M. This was calculated using the targeted 5% provision for bad debt as determined by the Office. Therefore, this reduction should not affect areas such as security and insurance, those costs are still covered in the total administration cost. Furthermore, NWC's total administration cost for the year ending March 2008 was in the region of \$1.35 billion. The determination of \$1.605M is therefore generous.

**The Office denies this request.**

#### **2. NWC's Request**

##### Employee Cost

*The OUR indicates that Employee Costs have been reduced by \$770.6M, the amount of the interest expense of the non-contributory pension, because it would be double-counting given that provision was made for actual interest payment.*

- *IFRS19 stipulates that an assessment of the pension benefit is required each financial year. The benefit for any given year has six components of which Current Service, Past Service and Interest Costs are included.*
- *Current service cost is the increase in each member Present value of benefit obligation (PVBO) for additional benefits accrued in the preceding year.*
- *Interest cost is the increase in the PVBO as the projected time of settlement is closer by one year.*

- *Past service cost is the increase on PVBO due to changes in benefits which are retroactive benefits for service already rendered.*
- *The NWC pension benefit obligation is calculated in accordance with the Projected Unit Credit (PUC) Method. The PUC method takes into consideration each period of service which creates an additional increment of benefit entitlement and measures each unit of the benefit entitlement separately. It should be noted that the entire post employment benefits are discounted. The use of this method involves making a number of actuarial assumptions which are NWC's best estimates of variables used in the determination final costs of the post employment benefits.*
- *The OUR has stated that the majority of the NWC's employees opted to remain with the non-contributory pension scheme which means that the majority of current and interest cost reflected in the Statement of Operation relates to the non-contributory pension scheme. In principle, Accrual accounting requires that obligations be accounted for in the period that they are recognized. These costs should be provided for and an asset (Special Fund) be created for this purpose.*

#### **Office's Comments**

The Office has not questioned the appropriateness of the amounts recorded on the books. The point is that there is no existing special fund and the Office therefore has committed to provide for the pension as they fall due. If the provision was also made for the interest on the liability the key question is what would this be used for? The amount would only provide additional cash for NWC without it being used to defray pension liabilities. The Office would therefore be providing for the payments twice. The Office, however, fully appreciates the implications for the Commission's Balance Sheet in terms of the accounting treatment for this liability. While the Office, therefore, reaffirms its position that consumers should not be asked to bear the burden to overcome this accounting issue it appreciates the implications for the NWC when its Balance Sheet is the subjected to analysis by lenders.

In this regard the Office undertakes to:

- Ensure that the revenue streams in this (as has been done) and future tariffs have provisions for these pension obligations.
- Work with the NWC to secure Audit advice as to statutory interventions that would satisfy the accounting standards.

**The Office denies this request but encourages the Commission to seek advice as to the statutory treatment that might be employed noting the Office's commitment to ensure that the revenue streams will be provided to meet ongoing pension obligations.**

### 3. NWC's Request

#### Electricity Costs

*The current electricity charge at March 2008 was \$327,493 for the month. This would be annualized at \$3,929,916 with no expected increase which would be prudent. A projected 30% increase is conservative as electricity movement in the financial year 2007/8 was 71% (\$191,865/month to \$327,493/month).*

#### Office's Comments

The Office is mindful of the recommended position that regulators should as a matter of convention, respond to the requests that are presented in the filing. The Office is of the view, however, that it must consider issues in terms of the realities facing the companies and consumers and therefore should not be constrained by "regulatory dogma". It cannot be denied that Jamaica, as has the entire world, is facing unprecedented increases in energy costs. It would have been irresponsible of the Office not to have evaluated the NWC's provisions for electricity costs against this reality and it is in this context that the Office increased the provision from the \$2.9B proposed by the NWC to \$3.5B. This adjustment assumes that the NWC will and must aggressively implement energy conservation and efficiency measures to and that it will treat with this aspect of its operations as a critical imperative.

**The Office denies the request for any further increased provisions in electricity cost.**

### 4. NWC's Request

#### Foreign Exchange Loss

*The OUR has indicated that the reason for disallowing the foreign exchange loss is that loans represent assets on the Balance Sheet and which translate into an increase in asset values and depreciation charges. It should be noted that loans are represented as liabilities and as stipulated by IAS 21 assets purchased in a foreign currency are converted at a specific date and there are no further adjustment as it relates to foreign currency. In short any foreign exchange loss or gain is borne by the entity. In addition, the PAM is calculated on a monthly basis using the various components and depreciation is calculated on the value of the assets at the conversion date.*

#### Office's Comments

The Office is not questioning the fact that foreign exchange losses are to be included in the financial statements. However, for the purpose of setting tariffs the regulator looks at the test year costs and changes that are 'known and measurable' at the time of setting the tariff. Speculation on future foreign exchange loss would not qualify for inclusion. In responding to this request the Office can only repeat **paragraph 5.19** of the Determination Notice:

"The Office is of the opinion that the loans represent assets on the balance sheet. With a devaluation of the dollar and an increase in the



Jamaican dollar value of the loans there is a corresponding increase in the asset values and the depreciation charges associated with these assets. The depreciation charge is the flip side of the principal payments as it allows for the reservation of cash to defray principal payments on loans. The PAM allows for changes in the depreciation charge and return on capital arising from movements in the foreign exchange rate. The Office has therefore disallowed this amount in the revenue requirements as it is highly speculative and the effects are provided for elsewhere.”

**The NWC has not persuaded the Office to change this opinion and accordingly the request is denied.**

**5. NWC’s Request**

**Revenue Requirement**

*It is stated that if NWC had achieved the target level of efficiency set out in the 2003 Determination the profitability would have been 14% of the current revenue – some \$1.4B. The Office has assigned a deemed revenue of \$580M, after consideration the mitigating circumstances that had contributed to NWC not meeting this target. NWC is of the view that the estimated level of profitability based on efficiency gained is over-stated. NWC had implemented NRW reduction projects within its capacity and demonstrated a commitment to reduce the level of NRW through the various projects. The Office makes the point that with a more widespread effort, the NRW reduction target set at the last Determination Notice could have been achieved. This is not the reality; hence the decision of the Office regarding expectations of revenue arising from these activities should be tempered by this reality. We are of the view that the provision of the “deemed revenue” should, in fact, be less than the \$580M indicated and would prefer that it were removed altogether.*

**Office’s Comments**

This argument is not justified; the aim of a tariff review is not only to determine rates, but also to establish criteria, requirements and standards to promote the efficient operation of NWC and thus bring benefits to consumers. Any tariff review therefore will examine opportunities for efficiency gains and to the extent that realization of the improvements require specific revenues these are provided for in the tariff. This was the case at the tariff review in 2003. The Office cannot therefore ignore the performance of the NWC in meeting the performance standard. The Office is minded that in the Determination Notice it recognized certain circumstances and the realities that faced the Commission which mitigated against its ability to meet some standards and to this end applied a penalty of \$580M rather than the \$1400M that was expected to have flowed out of the provisions of the 2003 tariff.

**The Office denies the NWC’s request to reduce or remove this imposition in its revenues.**

## 6. NWC's Request

### Rate Structure

*K-factor Program, Section 9.9*

*NWC supports the proposed K-Factor programs. We propose, however, that the following adjustments be made:*

- *That the introduction of any X-factor be delayed by at least 2 years, to allow NWC sufficient time to implement the projects and obtain benefits.*

*The first 4- 6 months of the program will involve preparatory work – including finalizing financing for the K-factor projects.*

*NWC is required to comply with the government's procurement guidelines, and therefore some 3-4 months is likely to be required for the contract award process.*

*The improvement works are therefore likely to commence near the beginning of the next financial year. The benefits would therefore not begin until a point within the next financial year.*

- *The level of the annual X-factor from Year 2009 is high and should be reduced.*

*The basis for deriving the X-factor is not clear*

*A downward adjustment to a level more in keeping with anticipated benefits is needed.*

*The provision for sewerage rehabilitation will not result in a net improvement in NWC's revenues*

*The sewerage of KSA, would increase revenue, an increase which would not be sufficient to offset the investment required based on the level of the sewerage tariff*

*Leakage reduction will reduce losses and increase the opportunity for water sales; there is no direct correlation between water sales and savings due to leakage*

- *The OUR does not seem to have a clear basis for determining the value of the X-factor. NWC is therefore proposing that the OUR commit to a review of the X-factor in the future when data will be available from the K-factor works program.*

### Office's Comments

The Office has allowed a one-year period for the X-factor to become effective. Most of the programmes to be carried out by the K-factor are activities which the NWC, in the normal course of business, would have to make provisions for and therefore savings will be made. The Office is also of the opinion that

the provisions of the K-factor are not the only means of improving efficiency. The NWC's own submission on the western NRW programme indicates that action on commercial losses can produce significant gains. A 7% X-factor in the second year of the K-factor regime should be achievable with the added funds being available.

The level of X-factor is conditioned by the need to recover the K-factor funds in such a way such that shocks to rates and revenues are minimized. The Office also took into consideration that some of the K-factor programmes would not yield additional revenues and the lag of benefits and therefore at the end of year 2024 the total X-factor recovery is about \$10 billion below the proceeds of the K-factor.

The Office will not dictate the individual NRW programme to be undertaken but expects that the NWC would do the analysis in order to prioritize the projects that provide the greatest benefits.

The Office is of the opinion that the whole point of the K-factor programme is to reduce NRW in order to increase revenues or save costs. While there might not be a direct link between water sales and savings in leakages, there is an indirect one that can be justified. That is, leak reduction will lead to the availability of a higher volume of water available for sale or a reduction in cost of operations. This will lead to higher revenue levels or lower costs. Again the NWC should prioritize the projects such that the benefits outweigh the costs.

The Office however, regards successful implementation of the NRW programme as critical to the future of the NWC and the long term benefit of consumers that it will, as indicated in the Determination Notice monitor this activity closely and will measure the benefits accrued so as to assess the outcome against the assumed outcomes. In this regard, commencing with year 3, the results achieved will be analyzed at each annual review.

## **7. NWC's Request**

*The Commission is proposing that given the current global economic climate and rising oil prices that the electricity component of PAM be separate and represent a direct pass through to the customer. This should be reflected on the customer bill as a single line item and would be directly linked to the monthly JPS bill.*

### **Office's Comments**

In order to fulfill this proposal the NWC would be required to formally propose this new intention to the Office at subsequent tariff review. The Office considers this a new proposal and not one for reconsideration.

## 8. NWC's Request

### Capital Expenditure (Capital Program)

*The OUR stated that costs and revenues associated with the capital works program in NWC's tariff application were not included in the tariff determination as NWC had not presented robust information in regard to the added revenues which would flow from these investments. Revenue and cost data associated with the capital works program were included in the tariff model submitted to the OUR but not at the level of detail expected.*

### Office's Comments

In the determination of rates the Office may consider changes to the test year costs that are known and measurable. The Office was not convinced that there was rigor in the estimation of either the cost of new capital works or the changes in sales that would arise from the works. No basis for the demand forecast was provided and no evidence that the capital works submitted would meet the demand at the least cost.

The Office is also of the opinion that the unit cost for the provision of service as determined in this review provides for the recovery of capital costs. Any incremental service provided would therefore recover an incremental amount of capital cost.

**The Office denies the NWC's request as it relates to capital expenditure.**

## 9. NWC's Request

### Rate Structure

#### **NRW**

*OUR has set a target Non-Revenue Water (NRW) of 55% within three (3) years. Non-Revenue Water represents water that has been produced and has been 'lost' before it reaches the consumer expressed as a percentage. The original premise of the last determination that NRW increased from 57% to 65% is incorrect in that the 57% NRW of December 2003 referred to is in fact the Unaccounted For Water (UFW) – the NRW of 60% should be used. UFW is defined as all water that cannot be accounted for through measurement or estimation. At that time, NRW would be closer to 60% as certain aspects of NRW (e.g. hydrant water) are not included in UFW.*

### Office's Comments

The provisions made in this tariff review should allow the NWC to focus on an issue that is fundamental to its sustainability. The Office is disappointed that the NWC does not recognize the urgency of the situation and has not set for itself even more aggressive targets than those proposed by the Office.

## **10. NWC's Request**

### Performance Benchmark

#### **Bad debt provision**

*The OUR has determined that bad debt provision should be no more than 5% of billing. We propose that the bad debt provision remains at 8% as the OUR has recognized that NWC may face challenges with the increase in rates due to an increased rate of disconnection, bad debt and theft (Section 12.2.2 Operational impact).*

*NWC will endeavour to achieve higher levels of collection than 92%.*

### Office's Comments

The arguments presented by the NWC are consistent with those expected of a monopoly cushioned by state ownership. The Office has a duty to impose/require on behalf of consumers, a level of operation that is reflective of a competitive environment. In this regard a 5% provision for bad debt is regarded as an acceptable norm for the circumstances prevailing in Jamaica. While the operations may not be totally comparable, JPS' provision for impairment of revenues is 1%.

NWC's unaudited accounts, for the nine months to December 2008, show an increase in gross consumer receivables of \$433.6 million or 6% of revenues, while the provision for bad debt was \$501 million or 7% of revenues. This is an indication that the provision made by NWC for bad debt is overly conservative. The Office is of the opinion that with increased focus the NWC can achieve the targeted 5% provision for bad debt.

**The Office denies the NWC's request as it relates to bad debt provision.**

## **B. Responses to Reconsideration Request as it relates to Quality of Service Standards**

The Office has reviewed the NWC's Request for Reconsideration as it relates to the quality of service standards and responds to the issues as follows:

### **1. NWC's Request**

*All claims should be in writing for administrative and legal purposes.*

#### **Office's Comment**

The Office is mindful of the need to have a record of the customer's claim. It is however of the view that NWC can implement an appropriate system to generate appropriate internal controls and internal invoices in instances where claims are taken over the phone or in the case of automatic compensation.

**The Office upholds its decision as specified in the Determination Notice.**

### **2. NWC's Request**

*WGS 5 - Exceptional cases should not be allowed, e.g. where a customer has deliberately misrepresented the facts in applying for a new connection and a previous delinquent account remains outstanding.*

#### **Office's Comment**

The Office does not accept this argument by the NWC as contracts for supply are mutually exclusive – unless otherwise agreed on by the customer. Good business practices on the part of the Commission should result in situations such as these being minimal. Further, the NWC by law may place a lien on any property with arrears for the Commission as a result of water supplied.

**The Office upholds its decision on WGS5 as specified in the Determination Notice.**

### **3. NWC's Request**

*WGS 8 - Defect should be verified by NWC in order for breach to be established.*

#### **Office's Comment**

**WGS 8 provides "Maximum time of 30 working days to repair or replace meter after being informed of defect."**

The Office agrees with the NWC's position and has modified this standard accordingly. This standard will now read as follows:

**WGS 8 – Maximum time of 35 working days to verify and repair or replace meter after being informed of defect.**

4. **NWC's Request**

*WGS 11 - Should remain a claim until change-over to the new CIS due to the challenges associated with determining reconnections for payments made at external agencies.*

**Office's Comment**

The Office is of the view that NWC should restore the customer's supply within the specified time as the customer not only paid the outstanding amount which resulted in the supply being disconnected but also paid a reconnection fee to ensure the restoration of the supply. It is therefore unreasonable in the event that NWC breaches this standard to expect the customer to bear any additional cost that may be associated with submitting a claim for the breach.

**The Office therefore upholds that payment for breach under this standard will be credited automatically by the Commission.**

5. **NWC's Request – Metering, Section 11:14**

*The NWC is applying for an extension of the time required to achieve 85% functional meters as required: "The Commission must restore itself to 85% metering within fifteen (15) months." NWC is requesting that the requirement be extended to 24 months to restore itself to 85% functional meters as the whole process of procurement would take about 9 -12 months from invitation to award of contract. Once meters are received, installation would require a further 10 to 12 months.*

**Office's Comment**

The Office recognizes that there is a genuine problem associated with the Government's procurement process which may likely affect the NWC's ability to achieve the target set by the OUR within the timeframe specified.

**The Office therefore extends the timeframe for the NWC to restore itself to 85% functioning meters to within 24 months of the Determination Notice.**

6. **NWC's Request– Economic Development Wastewater Tariff (EDWT)**

*The continuance of sewerage rebates under the EDWT should not be a requirement of the tariff determination as this would be a cost to the NWC, provisions for which have not been made in the tariff determination.*

**Office's Comment**

The Office disagrees with the NWC that continuance of the scheme imposes a cost on the Commission. In fact, if at least 50% of the water used by these companies is retained in the manufacturing process, the companies place less stress on the Commission's sewerage facilities.

**The Office maintains that the NWC should conduct a review of the EDWT stipulating the pros and cons of the scheme. The review should be conducted within three (3) months of the Determination.**

## 7. **NWC's Request**

*The National Water Commission is applying for a reconsideration of Quality of Service Standards WGS7 and WGS11. Due consideration should be given to the inherent constraints that dictate the Commission's scope of operation. The NWC cannot be penalized for breaches that are subject to factors outside of its control or occur as a result of sound business decisions. It is therefore proposed that all compensations especially those that are automatic be made subject to the following qualifying conditions:*

- *Customer's account must be in good standing.*
- *Penalties are not due for breaches due to factors outside of the Commission's control.*

### **Office's Comment**

The Office is of the view that if a customer's account is not in good standing, it is subject to a separate procedure namely disconnection. If the NWC has not proceeded in such a manner, there is the acceptance that the customer is in good standing and should therefore benefit from all rights. As it relates to factors 'outside of the Commission's control', the Office will address these concerns in the Quality of Service Explanatory Document which will follow this Determination.

## 8. **NWC's Request - WGS7 Meter Installation**

*The NWC is expected to operate as a viable commercial entity and will therefore have to operate in a prudent manner when making business decisions. In order for the Commission to be liable under this standard it is only reasonable to stipulate certain qualifying conditions:*

- *It should be required that a customer's account be in good standing (a definition would have to be developed and would include accounts with payment arrangements being honored and queries in progress with customers) in order for the company to have any obligation to incur further expenses associated with providing a meter for the said connection.*
- *The prevailing Jamaican socio-economic reality dictates that there are some areas ("red areas") where it is not safe for the Commission's employees to read meters. These areas have a payment rate of less than 10% of billing where flat rates are applied and the Commission is not able to carry out disconnection or meter reading functions in them. It does not therefore make good business sense with these prevailing factors to install meters in these areas and subsequently the NWC should not be penalized for its prudence.*



### **Office's Comment**

The Office specified in its Determination that with the exception of 'special contract' situations the NWC should meter all customers. The Office recognizes that there are areas where it would not be prudent to place meters. Consequently, the NWC needs to inform the Office of whether these 'red areas' fall outside of the 'special contracts' situation. The Office is prepared to entertain from the NWC details on how to treat with these areas.

**Within three (3) months of this Determination, the NWC must submit to the Office a report detailing 'red areas', the number of accounts in these areas and how same are treated.**

#### **9. NWC's Request – WGS10 – Meter Reading**

*Due to technical issues with the company's billing cycle (there may be more than two months between bill issues), we are requesting that this standard be reworded to state that a customer should receive no more than two consecutive estimated bills where there is access to a functioning meter.*

### **Office's Comment**

The Office is of the view that no modification is necessary for this standard. Additionally, in the event that that a meter is in need of repair, a separate standard specifies that the necessary repair or replacement should take place within 35 days.

**The Office maintains that there should be a maximum of 2 months between each meter reading and between bill issues as per WGS10.**

#### **10. NWC's Request – Reconnection after Payment of Overdue Amount**

*The geographical characteristics that prevail in the rural areas inhibit the company's ability to reconnect all supplies within the stipulated 24 hours. Where connections are separated by miles over rough terrain the company would have to engage the services of additional contractors who may not find it feasible since remuneration is based on a piece rate.*

*Rural areas are not only characterized by accessibility problems but also difficulties locating accounts since there is usually no specific address and the customers' names are the only identifying feature. Statistics show that in urban areas a contractor is able to perform 10 reconnections per day on average while for rural areas this rate is only 5 per day and significantly less in sparsely populated rural communities with frequent rainfall and poor roads. Parishes such as Manchester (hilly) and St Elizabeth (swampy) with their terrain and communities such as Mount Pleasant, Airy Castle and Belvedere in St Andrew stand out as areas where the 24 hour target may not be met at all times even with the best efforts of the NWC. We are therefore proposing that the previous requirement of at least 48 hours remain for rural areas.*

### **Office's Comment**

The Office is of the view that if the NWC was able locate the premises to effect a disconnection, returning to reconnect the supply should be easier given that the Commission would have details of the location. The fact that the customer also paid a reconnection fee cannot be overlooked, which makes it unreasonable to require the customer to wait up to 48 hours for the supply to be restored.

**The Office maintains its decision which stipulates a 24-hour reconnect timeline for all customers after arrears have been cleared.**

### **11. NWC's Request**

*Illegally connected accounts, which are disconnected, should be considered new supplies when reconnecting. Illegal supplies are usually disconnected thoroughly (a backhoe is more often than not used) and reconnecting these supplies requires an assessment of the resources required. Hence, 24 hours would not suffice for reconnection due to the works and equipment involved.*

### **Office's Comments**

The Office does not condone illegalities and as such, it was never its intention to have the NWC reconnect the supply of any account with irregularities within the same time period as an account with a legal supply. The OUR therefore agrees with the NWC that such an account should be viewed as a new connection and should be treated as per WGS1.

Notwithstanding however, after the customer has regularized the account, has fulfilled any penalty associated with the illegal supply and has had the service restored, the Office then expects equity in terms of the NWC's treatment of such an account against another.

### **Chapter 3 : Revised Decisions**

This chapter restates the decisions taken by the Office in the Determination Notice taking into account any changes arising as a consequence of the Reconsideration Request.

- 1. The Office has determined that the effective increase of NWC rates shall remain at 23%.**

The rates effective as at May 1, 2008, shall be as shown in Table 13.1

**Table 13.1 Water Rates**

	<b>SERVICE CHARGE</b>	<b>OUR-Determined Rates</b>
	5/8 inch/15mm	364.59
	3/4 inch/20mm	748.34
	1 inch/25mm	978.63
	1 1/4 inch/30mm	1,842.13
	1 1/2 inch/40mm	1,842.13
	2 inch/50mm	2,609.64
	3 inch/75mm	4,739.64
	4 inch/100mm	7,656.29
	6 inch/150mm	11,666.72
	<b>CONSUMPTION CHARGE/1000 Gal</b>	
	<b>Commercial</b>	779.45
	<b>Condominiums</b>	386.65
<b>Domestic</b>	00 to 03	207.86
	03 to 06	366.46
	06 to 09	395.67
	09 to 12	505.03
	12 to 20	628.97
	20 & above	809.61
	<b>CONSUMPTION CHARGE/1000 litres</b>	
	<b>Commercial</b>	171.39
	<b>Condominiums</b>	85.01
<b>Domestic</b>	00 to 14	45.70
	14 to 27	80.58
	27 to 41	87.02
	41 to 55	111.06
	55 to 91	138.30
	91 & above	178.04

**2. Price Adjustment Mechanism (PAM)**

The PAM captures the movement of the consumer price index, foreign exchange (J\$/US\$) and kilowatt hour charge (kwh). The formula is described below:

$$\text{PAM} = [w_{fe} * \Delta FE + w_{cpi} * \Delta CPI + w_{ec} * \Delta kwh] * 100$$

where  $w_{fe}$  is the weight for foreign exchange,  $w_{cpi}$  is the weight for CPI and  $w_{ec}$ , the weight for kwh and

$\Delta$  is the percentage change in the respective variables, that is, current value of each variable less the base value

**The Office has determined that the weights for the Price adjustment Mechanism are as shown in Table 13.2**

**Table 13.2: Office-Determined PAM Weights**

Index	2008 Weights
Foreign exchange	0.280
CPI	0.468
Electricity (kwh)	0.252
Total	1.0

The Office has also determined that all the indices are to be applied on a monthly basis. The PAM will also be reset at its anniversary at which time the new base values for the 3 components will be set. The annual reset for PAM (ANPAM) will be based on the following formula:

$$\text{ANPAM} = [w_{fe} * \Delta FE + w_{cpi} * \Delta CPI + w_{ec} * \Delta kwh] * 100$$

where  $w_{fe}$  is the weight for foreign exchange,  $w_{cpi}$  is the weight for CPI and  $w_{ec}$ , the weight for kwh and

$\Delta$  is the percentage change in the respective variables, that is, new base value of each variable less the old base value.

**The Office has disallowed any changes that the NWC had requested to the PAM structure.**

**3. K-factor application and recovery through X-factor**

The Office has allowed works programmes to be funded by the application of the K-factor as indicated in Table 9.4 (see Determination Notice WAT 2008/01)

The Office has determined that the X-factor representing efficiency gains arising from the K-factor programme shall be applied in accordance with the schedule in Table 9.4

The X –factor is to be calculated as a deduction from the bill after the normal rates and PAM

The K-factor is to be calculated on the bill balance after the X-factor is deducted

The Office has determined that in order to increase certainty in loan financing negotiations this tariff regime shall be in place for 5 years

The schedule of K-factor and X-factor shall continue across tariff regimes to ensure funds are available to service the loans.

Notwithstanding the above, the Office may make adjustments to the schedule at rate reviews to properly align cash inflows with financing requirements

NWC shall account for the deemed K-factor cash inflow calculated on the basis of 95% of the K-factor billing. A separate bank account shall be instituted to accommodate the cash flows from the K-factor and monthly report of balances and changes should be sent to the Office within 45 days of each reporting period. K-factor revenues shall be deemed collected within 45 day after billing

The Office had decided that the X-Factor will still be implemented in 2010 and the rates are the same as shown in Table 13.3 of Document No.WAT 2008/01.

Year ending March	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>K-factor</b>	5%	15%	20%	23%	25%	27%	27%	27%	26%	26%	24%	24%	23%
<b>X-factor</b>		7%	10%	10%	12%	12%	13%	15%	18%	22%	22%	23%	23%

**The Office commits to a review of the programme at the end of year 3 with a view to assessing the Commission’s performance under the K-factor efficacy of the Office’s projections with respect to expected efficiency gains. The levels of both the K- and X-factors will be subject to review.**

**4. Z-factor**

The Office has determined that there shall be provision for a “Z-factor” in the tariff formula being an allowed percentage increase in the PAM less X to facilitate events that satisfy all the following criteria:

- a) affect the Commission’s costs;
- b) are not due to the Commission’s managerial decisions; and
- c) are not captured by the other elements of the price regime.

However, the Z-factor will not be applicable in cases where insurance is available and has been included by the Office in the determination of the rates.

**5. Annual adjustment Formula**

The Office has determined that the new base rates at the beginning of each year shall be derived by: Old Base rate  $\times (1 + ANPAM - X \pm Z)$ .

The X-factor is to be calculated as a deduction from the billed amounts at approved base rates plus PAM. The K-factor is to be treated as a separate revenue stream from that of the rates and calculated after the deduction of the X-factor.

**6. Manufacturing Sector – Economic Development Wastewater Tariff**

The OUR is mindful of the importance of the manufacturing industry to the Jamaican economy. This importance is also recognized by the Commission through the establishment of the Economic Development Wastewater Tariff (EDWT), which encourages economic development by facilitating increased competitiveness, productivity and efficiency.

The Office supports the continuance of the 50% sewerage rebate under the scheme. It now requires the NWC to undertake a general review of the conditions under which the EDWT is applied to ensure equity within the sector and to eliminate any discrimination that may arise by its application to one company and omission in another. This review should include consultations with stakeholders within the sector and should occur within the first three months of this Determination.

**7. Metering**

The Office recognizes that there is a genuine problem associated with the Government's procurement process which may likely affect the NWC's ability to achieve the target set by the OUR within the timeframe specified. The Office therefore extends the timeframe for the NWC to restore itself to 85% functioning meters to within 24 months of the Determination Notice.

**The Office upholds all its decisions made as it relates to costs, rate structure, and revenue requirement as stated in the original Determination Notice.**

**The Office however, has revised some of the guaranteed standards and details of the changes are shown in the table below.**



**The Office now sets out the Guaranteed Standards as per the Table below:**

<b>CODE</b>	<b>FOCUS</b>	<b>DESCRIPTION</b>	<b>PERFORMANCE MEASURE</b>
WGS1	Access	Connection to supply	Maximum time of 10 working days <b>Compensation type: CLAIM</b>
WGS2	Delivery of bills	Issue of first bill	Maximum time of 48 working days after connection <b>Compensation type: CLAIM</b>
WGS3	Appointments	Keeping appointments	Must make and keep an appointment at customers request and must notify customer prior to appointed time, if cannot keep appointment. <b>Compensation type: CLAIM</b>
WGS4	Complaints	Response to Complaints	Maximum of 5 working days to acknowledge customer complaints, after receipt. Maximum time of 30 working days to complete investigation and respond, from date of receipt of complaint <b>Compensation type: CLAIM</b>
WGS5	Disconnection	Wrongful Disconnection	Where NWC in error disconnects a supply associated with an account which has no overdue amount. <b>Compensation type: AUTOMATIC</b>
WGS6	Account status	Issue of account status	Meter to be read on same day customer is moving, if on a weekday (within 2 days of move if on a weekend) providing 5 days notice of move is given. Maximum time of 15 working days to provide final bill after move. <b>Compensation type: CLAIM</b>
WGS7	Water meters	Meter installation	Maximum of 30 working days to install meter on customer's request <b>Compensation type: AUTOMATIC</b>
WGS8	Water meters	Repair or replacement of faulty meters	<a href="#">Maximum time of 35 working days to verify and repair or replace meter after being informed of the defect.</a> <b>Compensation type: CLAIM</b>
WGS9	Water Meters	Changing Meters	NWC must provide customer with details of the date of the change, meter reading on the day and serial number of the new meter - Effective September 2008 <b>Compensation Type: CLAIM</b>
WGS10	Water meters	Meter reading	Maximum of 2 months between each meter reading and between bill issues <b>Compensation type: CLAIM</b>
WGS11	Reconnection	Reconnection after payment of overdue amount	Maximum of 24 hours to restore supply. <b>Compensation type: AUTOMATIC</b>
WGS12	Reconnection	Reconnection after wrongful disconnection	NWC must reconnect a supply it inadvertently disconnected within 12 hours of being notified of the error and a written apology extended to the affected customer. <b>Compensation type: AUTOMATIC</b>
WGS13	Compensation	Payment of compensation	Maximum of 30 days after claim is received to process and make payment- automatic credits should also be made within this period. Customer must make claim within 90 days <b>Compensation type: CLAIM/AUTOMATIC</b>



## 7. Compensation

The Office has determined that the compensation for breach of a standard will remain four (4) times the applicable service charge when a claim is made and two (2) times the service charge when automatic payment is made.

If the payment due under a particular standard is not paid within the specified period, the NWC is liable for additional compensation, which will repeat itself for subsequent periods until payment is made. Breaches of the individual standard will, however, attract only one payment.

**Table 13.4: Overall Standards**

<b>CODE</b>	<b>FOCUS</b>	<b>DESCRIPTION</b>	<b>PERFORMANCE MEASURE</b>
WOS1	Water Quality	Testing samples for impurities	To ensure that water is within standards as specified by MOH
WOS2	Water Pressure	Minimum/maximum water pressure	Must maintain a pressure ranging from 20 to 60 psi
WOS3	Reliability of Supply	Notify public of intention to interrupt supply – planned interruptions	Minimum notification time of 12 hours for short interruptions (not more than 4 hours) and 24 hours for longer interruptions (more than 4 hours)
WOS4	Reliability of Supply	Restoration after emergency lock-off	Maximum time of 24 hours to restore supply
WOS5	Sewerage	Correction of sewerage problems	Maximum of 24 hours to correct sewerage problems after being informed
WOS6	Sewerage	Sewerage effluent quality	Ensure that sewerage effluent is within the standards specified by NEPA
WOS7	Leaks	Repair of Leaks	NWC must achieve a 90% target for the repair of leaks within 3 days

**NWC's Reconsideration Request**

**OUR's Determination Notice of April 28, 2008**  
**NWC's Reconsideration Request**

We note the Determination Notice based on a review of National Water Commission's (NWC) rates. Set out below are our comments on the Determination Notice, following our preliminary comments of Friday, March 28.

**OFFICE DETERMINATION**

1. Section 5.17

The OUR provided \$1,606,971 in the Determination for the 2007/08 Administration Expenses, which is some \$85.4M less than NWC budgeted amount of \$1,692,330M. Based on the need in areas such as rental, security services and insurance, we believe that the amount provided in our budget is appropriate.

2. Section 5.12

The OUR indicates that Employee Costs has been reduced by \$770.6M, the amount of the interest expense of the non-contributory pension, because it would be double counting given that provision was made for actual interest payment.

- IFRS19 stipulates that an assessment of the pension benefit is required each financial year. The benefit for any given year has six components of which Current Service, Past Service and Interest Costs are included.
- Current service cost is the increase in each member Present value of benefit obligation (PVBO) for additional benefits accrued in the preceding year.
- Interest cost is the increase in the PVBO as the projected time of settlement is closer by one year.
- Past service cost is the increase on PVBO due to changes in benefits which are retroactive benefits for service already rendered.
- The NWC pension benefit obligation is calculated in accordance with the Projected Unit Credit (PUC) Method. The PUC method takes into consideration each period of service which creates an additional increment of benefit entitlement and measures each unit of the benefit entitlement separately. It should be noted that the entire post employment benefits are discounted. The use of this method involves

making a number of actuarial assumptions which are NWC's best estimates of variables used in the determination final costs of the post employment benefits.

- The OUR has stated that the majority of the NWC's employees opted to remain with the non-contributory pension scheme which means that the majority of current and interest cost reflected in the Statement of Operation relates to the non-contributory pension scheme. In principle, Accrual accounting requires that obligations be accounted for in the period that they are recognized. These costs should be provided for and an asset (Special Fund) be created for this purpose.

3. Electricity Costs, Section 5.16

The current electricity charge at March 2008 was \$327,493 for the month. This would be annualized at \$3,929,916 with no expected increase which would be prudent. A projected 30% increase is conservative as electricity movement in the financial year 2007/8 was 71% (\$191,865/month to \$327,493/month).

4. Foreign Exchange Loss , Section 5.19

The OUR has indicated that the reason for disallowing the foreign exchange loss is that loans represent assets on the Balance Sheet and which translate into an increase in asset values and depreciation charges. It should be noted that loans are represented as liabilities and as stipulated by IAS 21 assets purchased in a foreign currency are converted at a specific date and there are no further adjustment as it relates to foreign currency. In short any foreign exchange loss or gain is borne by the entity. In addition, the PAM is calculated on a monthly basis using the various components and depreciation is calculated on the value of the assets at the conversion date.

5. Revenue Requirement, Section 8.12

It is stated that if NWC had achieved the target level of efficiency set out in the 2003 Determination the profitability would have been 14% of the current revenue – some \$1.4B. The Office has assigned a deemed revenue of \$580M, after consideration the mitigating circumstances that had contributed to NWC not meeting this target. NWC is of the view that the estimated level of profitability based on efficiency gained is over-stated. NWC had implemented NRW reduction projects within its capacity and demonstrated a commitment to reduce the level of NRW through the various projects. The Office makes the point that with a more widespread effort, the NRW reduction target set at the last Determination Notice could have been achieved. This is not the reality, hence the decision of the Office regarding expectations of revenue arising from these activities should be tempered by this reality. We are of the view that the provision of the “deemed revenue” should, in fact, be less than the \$580M indicated and would prefer that it were removed altogether

## **RATE STRUCTURE**

K-factor Program, Section 9.9

6. NWC supports the proposed K-Factor programs. We propose, however, that the following adjustments be made:

That the introduction of any X-factor be delayed by at least 2 years, to allow NWC sufficient time to implement the projects and obtain benefits.

The first 4- 6 months of the program will involve preparatory work – including finalizing financing for the K-factor projects. NWC is required to comply with the government's procurement guidelines, and therefore some 3-4 months is likely to be required for the contract award process.

The improvement works are therefore likely to commence near the beginning of the next financial year. The benefits would therefore not begin until a point within the next financial year.

The level of the annual X-factor from Year 2009 is high and should be reduced.

The basis for deriving the X-factor is not clear  
A downward adjustment to a level more in keeping with anticipated benefits is needed.

The provision for sewerage rehabilitation will not result in a net improvement in NWC's revenues

The sewerage of KSA, would increase revenue, an increase which would not be sufficient to offset the investment required based on the level of the sewerage tariff  
Leakage reduction will reduce losses and increase the opportunity for water sales; there is no direct correlation between water sales and savings due to leakage

- The OUR does not seem to have a clear basis for determining the value of the X-factor. NWC is therefore proposing that the OUR commit to a review of the X-factor in the future when data will be available from the K-factor works program.

7. The Commission is proposing that given the current global economic climate and rising oil prices that the electricity component of PAM be separate and represent a direct pass through to the customer. This should be reflected on the customer bill as a single line item and would be directly linked to the monthly JPS bill.

## **QUALITY OF SERVICE STANDARDS**

### Quality of Service Standards, Section 11

8. All claims should be in writing for administrative and legal purposes.
9. WGS 5 - Exceptional cases should not be allowed, e.g. where a customer has deliberately misrepresented the facts in applying for a new connection and a previous delinquent account remains outstanding.
10. WGS 8 - Defect should be verified by NWC in order for breach to be established.
11. WGS 11 - Should remain a claim until change over to the new CIS due to the challenges associated with determining reconnections for payments made at external agencies.

### **Metering, Section 11:14**

12. The NWC is applying for an extension of the time required to achieve 85% functional meters as required: “The Commission must restore itself to 85% metering within fifteen (15) months.” NWC is requesting that the requirement be extended to 24 months to restore itself to 85% functional meters as the whole process of procurement would take about 9 -12 months from invitation to award of contract. Once meters are received, installation would require a further 10 to 12 months.

### **Manufacturing Sector – Economic Development Wastewater Tariff (EDWT), Section 11.16, 11.17**

13. The continuance of sewerage rebates under the EDWT should not be a requirement of the tariff determination as this would be a cost to the NWC, provisions for which have not been made in the tariff determination.

### **Reconsideration request – Quality of Service Standards**

14. The National Water Commission is applying for a reconsideration of Quality of Service Standards WGS7 and WGS11. Due consideration should be given to the inherent constraints that dictate the Commission’s scope of operation. The NWC cannot be penalized for breaches that are subject to factors outside of its control or occur as a result of sound business decisions. It is therefore proposed that all compensations especially those that are automatic be made subject to the following qualifying conditions:

- o Customer’s account must be in good standing.
- o Penalties are not due for breaches due to factors outside of the Commission’s control.

### **WGS 7 – Meter Installation**

15. The NWC is expected to operate as a viable commercial entity and will therefore have to operate in a prudent manner when making business decisions. In order for the Commission to be liable under this standard it is only reasonable to stipulate certain qualifying conditions:
- It should be required that a customer's account be in good standing (a definition would have to be developed and would include accounts with payment arrangements being honored and queries in progress with customers) in order for the company to have any obligation to incur further expenses associated with providing a meter for the said connection.
  - The prevailing Jamaican socio-economic reality dictates that there are some areas ("red areas") where it is not safe for the Commission's employees to read meters. These areas have a payment rate of less than 10% of billing where flat rates are applied and the Commission is not able to carry out disconnection or meter reading functions in them. It does not therefore make good business sense with these prevailing factors to install meters in these areas and subsequently the NWC should not be penalized for its prudence.

### **WGS10 – Meter Reading**

16. Due to technical issues with the company's billing cycle (there may be more than two months between bill issues), we are requesting that this standard be reworded to state that a customer should receive no more than two consecutive estimated bills where there is access to a functioning meter.

### **WGS 11 – Reconnection after Payment of Overdue Amount**

17. The geographical characteristics that prevail in the rural areas inhibit the company's ability to reconnect all supplies within the stipulated 24 hours. Where connections are separated by miles over rough terrain the company would have to engage the services of additional contractors who may not find it feasible since remuneration is based on a piece rate.

Rural areas are not only characterized by accessibility problems but also difficulties locating accounts since there is usually no specific address and the customers' names are the only identifying feature. Statistics show that in urban areas a contractor is able to perform 10 reconnections per day on average while for rural areas this rate is only 5 per day and significantly less in sparsely populated rural communities with frequent rainfall and poor roads. Parishes such as Manchester (hilly) and St Elizabeth (swampy) with their terrain and communities such as Mount Pleasant, Airy Castle and Belvedere in St Andrew stand out as areas where the 24 hour target may not be met at all times even with the best efforts of the NWC. We are therefore proposing that the previous requirement of at least 48 hours remain for rural areas.

18. Illegally connected accounts, which are disconnected, should be considered new supplies when reconnecting. Illegal supplies are usually disconnected thoroughly (a backhoe is more often than not used) and reconnecting these

supplies requires an assessment of the resources required. Hence, 24 hours would not suffice for reconnection due to the works and equipment involved.

## **CAPITAL EXPENDITURE**

### **Capital Program Section 6.1.1, 6.4**

19. The OUR stated that costs and revenues associated with the capital works program in NWC's tariff application were not included in the tariff determination as NWC had not presented robust information in regards to the added revenues which would flow from these investments. Revenue and cost data associated with the capital works program were included in the tariff model submitted to the OUR but not at the level of detail expected.

## **RATE STRUCTURE**

### **NRW, Section 9.9.10**

20. OUR has set a target Non-Revenue Water (NRW) of 55% within three (3) years. Non-Revenue Water represents water that has been produced and has been 'lost' before it reaches the consumer expressed as a percentage. The original premise of the last determination that NRW increased from 57% to 65% is incorrect in that the 57% NRW of December 2003 referred to is in fact the Unaccounted For Water (UFW) – the NRW of 60% should be used. UFW is defined as all water that cannot be accounted for through measurement or estimation. At that time, NRW would be closer to 60% as certain aspects of NRW (e.g. hydrant water) are not included in UFW.

## **PERFORMANCE BENCHMARKS**

### **Bad debt provision, Section 10.1.4**

21. The OUR has determined that bad debt provision should be no more than 5% of billing. We propose that the bad debt provision remains at 8% as the OUR has recognized that NWC may face challenges with the increase in rates due to an increased rate of disconnection, bad debt and theft (Section 12.2.2 Operational impact).

NWC will endeavour to achieve higher levels of collection than 92%.