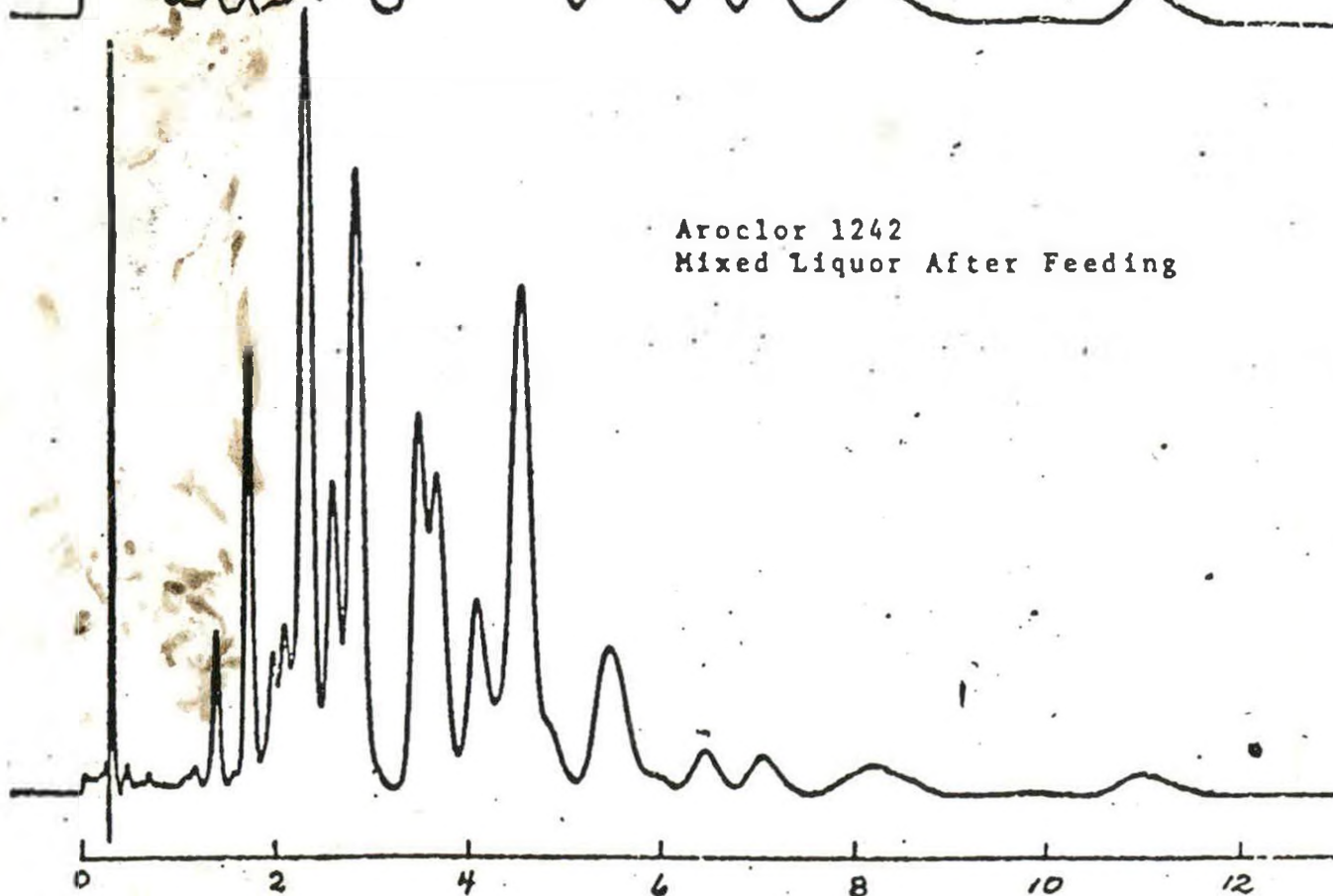


Semi-Continuous Activated Sludge Biodegradation

Aroclor 1242
Mixed Liquor Before Feeding
72 Hour Exposure



Aroclor 1242
Mixed Liquor After Feeding



PLAINTIFF'S
EXHIBIT

11003-E

NEW 027008

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We Request Your Approval to
Publish the Attached Material

Approval for Publication

Your approval covers the use of the material in any media available to the Information Services Department. This may include magazines, newspapers, radio, television, the Westinghouse NEWS, the Westinghouse ENGINEER, or a combination of these outlets.

Please limit changes in the text to matters of fact or to making the copy consistent with Company policy. Make necessary changes directly on manuscript—front or back. In matters of editorial judgment, the Information Services Department reserves the right of decision.

Information Services Department
Westinghouse Electric Corporation

REF: 2604-13

Please Return to Sender by: July 13, 1976

Date Sent: July 8, 1976

Location and Department:

Name:

Approved by: Date:

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OK
JRE
7/13/76

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Description of Attached Material:

WESTINGHOUSE TO QUIT USING PCBs IN TRANSFORMERS

Please Return to:

☒ Bldg. - 1535
V. J. Rinaldi
235-3320

NPC00026461

753798

Contact: V. J. Rinaldi
Telephone: (412) 255-3320

FOR APPROVAL ONLY

WESTINGHOUSE TO QUIT USING PCBs IN TRANSFORMERS

PITTSBURGH, July 15 -- Westinghouse Electric Corporation here announced, effective today, that it is phasing out of the use of polychlorinated biphenyl compounds (PCBs) used as a fire-resistant insulating fluid in transformers. As of today, no new quotations will be made for units filled with PCB for shipment after December 31, 1976. PCBs are known by the industry trade names of Inerteen/Askeral.

Westinghouse customers who have orders placed for delivery after December 31, 1976, are being contacted to determine if existing shipping schedules can be advanced and are being offered alternatives.

Mr. M. J. McDonough, executive vice president of Power Systems Transmission & Distribution Group stated that this announcement covers transformer products where PCB is used. PCBs are a class of chemicals whose individual members have widely differing combinations of physical, chemical and biological properties.

"During the last seven years, a significant amount of our total production has been with PCBs," said Mr. McDonough. "Phasing out of its use

- more -

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Westinghouse To Quit
Using PCBs In Transformers

- 2 -

will have a serious impact on future systems designs, consulting engineers and our customers. We regret having taken this action."

Westinghouse has produced PCB-filled transformers for over 40 years. However, in today's environment the potential liability associated with manufacturing and handling of PCBs is constantly increasing in inordinate levels.

"We do not feel it is in our best interest or our customers to continue producing transformers using this fluid," said Mr. McDonough.

Various forms of legislation have passed or are now pending, all of which either severely regulate, or restrict the use of PCBs.

EPA officials have indicated their intent to put into effect during 1976 proposed rules and regulations covering fines, penalties and controls for spills, discharge and the transport of PCB fluids. A spill is defined as being as little as one pound. In instances involving gross negligence, an individual can be fined \$10,000 and/or one year in jail.

Mr. McDonough said, "We are hopeful that our customers realize the potential liabilities and consequences that we all are exposed to if we continue to produce transformers insulated and cooled with PCB fluid."

##2604-13##

-776-

COPY OF WESTINGHOUSE PCB POSITION PAPER ENCLOSED.

NPC00026463

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INERTEEN POSITION PAPER

The Westinghouse Transformer Divisions announce that effective 12:01, July 15, 1976, no new quotations will be made for units filled with Inerteen (a polychlorinated biphenyl compound) for shipment after December 31, 1976. This announcement covers only transformer products.

We regret having to take this action. Westinghouse has produced Inerteen-filled transformers for over 40 years but in today's environment the concern related to polychlorinated biphenyl compounds has been increased to inordinate levels. Therefore, we do not feel that it is in our best interests or our customers' to continue to produce apparatus utilizing this fluid.

Various forms of state legislation have been passed or are now pending, all of which either severely regulate or restrict the use of polychlorinated biphenyl compounds in closed electrical systems. The U.S. EPA is continuing to force the elimination of these compounds from even being used in closed electrical systems. The EPA has proposed regulations covering fines, penalties and controls for spills, discharge and the transport of polychlorinated biphenyl compounds. These regulations define a spill as an amount of one pound or more. Thus, in instances involving gross negligence in a spill from a transformer, an individual could be fined \$10,000 and/or imprisoned for one year. In addition, the owner or operator of the facility where this transformer was stored or in operation could be subject to a maximum fine of \$500,000. Finally, the same EPA officials have indicated a proposed discharge limitation on polychlorinated biphenyl compounds from manufacturing facilities that effectively preclude further operations involving polychlorinated biphenyl compounds in transformer manufacturing facilities. These limitations prohibit polychlorinated biphenyl compounds in any process water discharged to navigable waters, with the exception of jet ejector, welding and plating water discharge. Further, all other discharges, including the above exceptions shall not exceed a monthly average concentration of one ppb of polychlorinated biphenyl compounds.

In addition to the foregoing action, we are immediately contacting those customers having orders now entered for delivery after December 31, 1976, to determine if existing shipping schedules for these units can be advanced or if one of the alternatives listed below would be acceptable.

- (A) A detailed listing of all customers with whom we now have orders for delivery after December 31, 1976, has been made. These customers in conjunction with field sales and division sales personnel will be contacted to determine if these units can be moved forward in our production schedule.
- (B) If forward movement of order is impractical, the substitution of oil or silicone can be made leaving delivery time as originally quoted.

(C) Ventilated dry type -- air cooled units substitutable for some applications.

(D) Sealed dry type -- another alternative design.

An estimate of the present relative price levels (compared to oil) for each of the alternative designs is set forth below:

Oil Filled	<u>100%</u>
Ventilated Dry Type	<u>120-125%</u>
Inerteen (Discontinued after 12/31/76)	<u>125%</u>
Silicone	<u>145-155%</u>
Sealed Dry Type	<u>200%</u>

There still remains a great many unanswered questions relating to the retrofitting of existing Inerteen filled transformers. We are continuing to investigate the practical aspects of this alternative and once specific conclusions are reached, we will make this information available.

If retrofitting is being considered, it is our conclusion at this time that each transformer must be analyzed on a unit-by-unit basis to determine:

- (A) Its loading and thermal characteristics
- (B) Derating if necessary
- (C) Gas space
- (D) Type of gasketing (where used)
- (E) Compatibility of residual Inerteen with other insulating fluids

Even after the insulating fluid has been drained and numerous flushings, a residual amount of Inerteen will be retained in the transformer. It has not been determined at this time what EPA's position will be for retrofitted units but both the original fluid and the flushing fluid will have to be disposed of at a polychlorinated biphenyl compound treatment or disposal facility. Thus, these materials will have to be handled and disposed of in accordance with the procedures prescribed in ANSI C107 (1974).

We deeply regret having to take this action and are hopeful that our customers will realize the potential liabilities and consequences that we and they are exposed to if we continue to produce transformers insulated and cooled with the polychlorinated biphenyl compound fluid.

Westinghouse



Power Transformer Equipment

Grounding Transformers, CSP® Unit Substations, Mobile Unit Substations, Medium Power Transformers, Liquid Filled Shunt Reactors, Three Phase Step Regulators

Price References, Discounts and Multipliers®

Price Reference	Product	User Discount 48-001® Discount	Multiplier	Distributor Discount
®PL 48-125 (Dated 9-1-74)	Grounding Transformer, Liquid	Effective September 1, 1974 40%®	0.60®	Direct Only
®PL 48-220 (Dated 9-1-74)	CSP® Unit Substations	Effective September 1, 1974 40%®	0.60®	↓
®PL 48-320 (Dated 9-1-74)	Mobile Substation	Effective September 1, 1974 40%®	0.60®	
®PL 48-420 (Dated 9-1-74)	Substation and Medium Power Transformers (See Page 2 of Price List 48-420 for Ratings Covered)	Effective September 1, 1974 40%®	0.60®	See Schedule 48-008
®PL 47-521 (9-1-74)	Three Phase Step Regulators: Types UTS and UT	Effective September 1, 1974 40%®	0.60®	Direct Only

® Changed or added since previous issue.

® All users including private and public utilities, industrials, REA-coops, government agencies, federal, state, county and municipal governments, contractors and educational institutions.

® These price lists are for estimating purposes only.

® Not for general distribution.

Note: For renewal parts, refer to Selling Policy 100

Standard Conditions of Sale Prices

Prices, discounts and commissions are subject to change without notice.

Computing final net prices. Compute net price for each unit, drop the cents, and multiply by the number of units.

Price Policy®

Effective September 1, 1974

Prices are subject to adjustment upward or downward based on changes in Bureau of Labor Statistics labor and material indices as follows:

1. Definitions

a. Labor Index shall be the "Gross Average Hourly Earnings" rate in the Electrical Equipment Industry (SIC 36) as published in the "Monthly Labor Review" by the Bureau of Labor Statistics, U.S. Department of Labor.

b. Material Index shall be the Steel Mill Products Index (WPI 10-13) as published in the "Monthly Labor Review" by the Bureau of Labor Statistics, U.S. Department of Labor.

c. Base Labor and Material Indices, are:
Gross Average Hourly Earnings (SIC 36) **\$3.99**
Steel Mill Products Index (WPI 10-13) **169.8**

These are the most recently published indices as of September 1, 1974

Prices and discounts are subject to change without notice.

2. Adjustment Components

For the purpose of adjustment, the proportion of the contract price representing Labor is accepted as 55% and the proportion of the contract price representing Material is accepted as 35% (less the price of insulating oil content, if any, at 30 cents per gallon and Inerteen content, if any, at \$2.26 per gallon).

3. Adjustment Procedure

a. The Base Labor and Material Indices shall be compared with the Labor and Material Indices contained in the most recently published "Monthly Labor Review" available on the date of shipment and percentages of increase or decrease will be determined. The adjustments for changes in the cost of Labor and Material shall be obtained by applying such percentages of increase or decrease to the amounts representing Labor and Material, as indicated above, and the result shall be accepted as an increase or decrease in the price.

b. The price for insulating oil or Inerteen (if any) shall be adjusted upward or downward based upon the difference between 30 cents per gallon for oil and \$2.26 per gallon for Inerteen and the actual total cost of oil or Inerteen on the date of shipment of such oil or Inerteen to the Purchaser.

4. General

a. If shipment is delayed because of

causes beyond the reasonable control of Westinghouse or because of fire, flood, strikes or other labor difficulty, act of any governmental authority or of the Purchaser, riot, embargo, car shortage, wrecks or delays in transportation or inability, due to causes beyond its control, to obtain necessary labor, materials, or manufacturing facilities from usual sources, the price adjustment shall be determined on the basis of the date of actual shipment.

b. In the event of any change in the requirements of the contract prior to shipment resulting in a change in the contract price, the new price shall be considered as having been in effect on the date the order was received.

c. Should the indices referred to above be discontinued, or should the basis of their calculation be modified, proper indices shall be selected by mutual agreement.
d. In determining adjustment to the price for Labor and Material, changes in amounts shall be calculated to the nearest one-tenth of one percent.

Taxes

The price does not include any Federal, state or local property, license, privilege, sales, use, excise, gross receipts or other like taxes which may now or hereafter be applicable to, measured by or imposed upon or with respect to the transaction, the property, its sale, its value or its use.

September 1, 1974
Supersedes Selling Policy 48-000, dated June 27, 1974
E. D. C/2080, 2080/P

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Westinghouse



or any services performed in connection therewith. Purchaser agrees to pay or reimburse any such taxes which Westinghouse or Westinghouse's subcontractors or suppliers are required to pay.

Standard Terms of Payment

Standard terms of payment are net within 30 days from date of invoice.

Terms of payment vary depending upon the agency involved but it is generally understood that the U.S. Government will pay promptly upon receipt of invoice.

Accelerated or Delayed Payments

There will be no reduction in price for payments more favorable to Westinghouse than the standard terms.

If payments are not made in conformance with the standard terms, the quoted price shall, without prejudice to the right of Westinghouse to immediate payment, be increased by an amount equal to the lesser of 1.5% per month or fraction thereof on the unpaid balance or the highest legal rate.

Payments

If, in the judgment of Westinghouse, the financial condition of the purchaser, at any time during the manufacturing period, or at the time the product is ready for shipment, does not justify the terms of payment specified, Westinghouse may require full or partial payment in advance.

If shipments are delayed by the purchaser, payments shall become due from date when Westinghouse is prepared to make shipment. If manufacture is delayed by the purchaser, payment shall be made based on the contract price and percent of completion and purchaser shall reimburse Westinghouse for any additional costs resulting from such delay. Products held for the purchaser shall be at the risk and expense of the purchaser.

Delivery

F.O.B.-P/S-Frt./Ppd. and Allowed: This product is delivered f.o.b. point of shipment, freight prepaid to accessible common carrier point nearest to the first destination, and absorbed in the price.

Freight prepaid is defined as -

Area A - Shipments to destinations within the United States, except Alaska and Hawaii:

to the accessible common carrier point nearest to the first destination, but within the confines of the United States, except Alaska and Hawaiian Islands.

Area B - Shipments to destinations other than Area A: To the common carrier point

nearest to the point of departure from Area A to Alaska, Hawaii or Panama Canal Zone, Puerto Rico, and any other territory dependency, insular possession, or trust territory of the United States.

Delivery outside Continental United States

When shipment is made to a point or points outside the Continental United States such as Alaska, Hawaii or Panama Canal Zone, Puerto Rico, and any other territory dependency, insular possession, or trust territory of the United States, freight will be allowed to the common carrier delivery point nearest to the point of departure from the confines of the continental 48 states. Transportation charges incurred from the nearest common carrier point in the continental United States to final destination are the responsibility of the customer.

Export Packing

If the purchaser or the carrier requires the product packed for sea shipment[Ⓢ] (export packing), the proper price, addition must be made from the product price list.

F.O.B.-Destination-Frt./Ppd. and Allowed

When the purchaser's specification calls for delivery F.O.B. destination, Westinghouse will deliver F.O.B. accessible common carrier point nearest first destination, freight prepaid and 2% will be added to the net price.

In event of shipping loss or damage:

- (1) Notification must be given to the Westinghouse location from which the shipment originated within 72 hours of delivery;
- (2) Written notations of apparent loss and damage must be made on the carrier's delivery receipt;
- (3) Concealed damage must be immediately reported to the delivering carrier with a request for an inspection.

Cartage (Store Door) Delivery: Transportation

charges incurred from the nearest common carrier point to final destination or to ship side (in case of shipments to U. S. possessions) are the responsibility of the purchaser unless the common carrier furnishes store door delivery at no extra charge.

Transportation charges on local shipments from warehouses will be borne by Westinghouse to the same extent as common carrier furnishes store door delivery at no extra charge.

[Ⓢ] On large units, packing for sea shipment will, in general, consist of protective steel angle braces surrounding any easily damaged appurtenances which provide better protection than wood crating.

Origin, Method of Shipment and Routing:

Westinghouse will determine the point of origin of shipment, the method of transportation, and the routing of shipment. Purchasers requiring shipment by a method or routing other than that of Westinghouse selection will be billed any excess or premium in transportation charges. For example, in case the purchaser requests AIR EXPRESS shipment, Westinghouse will absorb an amount equal to the charges of the normally selected common carrier. If the actual transportation charges on these shipments are less than such common carrier charges, Westinghouse will absorb only the actual charges. Any charges for special services (such as special trains, lackage, or construction or repair of transportation facilities) will be paid or reimbursed by the purchaser.

If Westinghouse elects to ship by other than common carrier, the full transportation charges will be prepaid.

In no case will Westinghouse absorb transportation charges in excess of the actual amount received by the carrier for its services.

Purchaser Pick-up: No allowance will be made in lieu of transportation if the purchaser accepts shipment at factory, warehouse or freight station. Transportation charges will not be deducted from a selling price.

U. S. Government: When U. S. Government specifications require a government bill of lading, quotation will be F.O.B. point of shipment, freight not allowed.

Concealed Damage: Except in the case of F.O.B. destination shipments, Westinghouse will not participate in any settlement of claims for concealed damage. When shipment has been made under an F.O.B. destination basis, purchaser must unpack immediately and, if damage is discovered, must:

1. Not move product from point of examination.
2. Retain shipping container and packing material.
3. Notify carrier's agent to make inspection.
4. Send Westinghouse copy of carrier's inspection report.

Loss, Damage or Delay

Westinghouse shall not be liable for failure to perform or for delay in performance due to fire, flood, strike or other labor difficulty, act of any governmental authority or of the

Power Transformer Equipment

Grounding Transformers, CSP® Unit Substations, Mobile Unit Substations, Medium Power Transformers, Liquid Filled Shunt Reactors, Three Phase Step Regulators

Purchaser, riot, embargo, car shortage, wrecks or delay in transportation, inability to obtain necessary labor, materials, or manufacturing facilities from usual sources or due to any other cause beyond its reasonable control.

In the event of delay in performance due to any such cause, the date of delivery or time for completion will be postponed by such length of time as may be reasonably necessary to compensate for the delay.

Standard Warranty®

Westinghouse warrants that the equipment delivered by it will be of the kind and quality described in the order or contract and will be free of defects in workmanship and material. Should any failure to conform to this warranty appear within one year after date of shipment, Westinghouse shall, upon prompt notification thereof and substantiation that the equipment has been stored, installed, operated and maintained in accordance with Westinghouse recommendations and standard industry practice, correct such non-conformities, at its option, either by repairing any defective part or parts or by supplying a repaired or replacement part or parts f.o.b. Westinghouse repair plant or factory. However, if Westinghouse has installed the equipment or furnished field engineering services with respect to its installation, and provided such installation has not been delayed by the purchaser, said one year shall run from completion of the installation or 18 months after the date of shipment, whichever occurs first. In no event shall Westinghouse be responsible for providing working access to the defect, including disassembly and reassembly of the equipment.

The conditions of any tests shall be mutually agreed upon and Westinghouse shall be notified of, and may be represented at, all tests that may be made.

In case of trouble or failure, the type of oil used in the equipment, the type of lightning protection and the application of the lightning protective device to the apparatus will be checked to determine the liability of Westinghouse. ANSI standardization on bushings permits physical interchangeability between Westinghouse bushings and those of other manufacturers.

Because these standards cover only dimensional requirements with no control over quality and mechanical strength, when Westinghouse equipment is operated with other than Westinghouse manufactured bushings, this warranty is void in case of trouble traceable to those bushings.

This warranty is in lieu of all warranties of merchantability, fitness for purpose or other warranties, express or implied, except of title and against patent infringement. Correction of non-conformities in the manner and for the period of time provided above, shall constitute fulfillment of all liabilities of Westinghouse to the purchaser, whether based on contract, negligence or otherwise with respect to or arising out of such equipment.

Special Warranty

When requested, the Westinghouse standard warranty liability will be extended to cover, during the warranty period, the direct cost® of:

- Removing transformer or parts from service and loading to adjacent rail car or line-haul truck.
- Line-haul transportation between the factory or repair facility and the accessible common carrier point nearest (1) the installation site within the continental U. S., or (2) the point of entry (FOB surface carrier) or departure (to shipside) in the continental U. S.
- Unloading from rail car or line-haul truck adjacent to installation site and reinstallation of transformer or parts.

For this additional coverage, add 5% to the net price for each transformer.

Purchaser, as the owner of the product, will retain full responsibility for any damage in transit.

The total Westinghouse liability for (a), (b), and (c) above under this special warranty will not exceed 50 of the net purchase price of the warranted product.

® Not included is the expense for:

1. Removing adjacent apparatus, structures or fire walls.
2. Extra rigging, loading, unloading, and local transportation where rail car or line-haul truck cannot be placed adjacent to installation site.
3. Installation of spare transformers, incremental costs of supplying temporary service, etc.
4. Special services such as, but not limited to, special trains or trucks, premium transportation, lighterage, or construction or repair of transportation facilities.

This warranty is in lieu of all warranties of merchantability, fitness for purpose or other warranties, express or implied, except of title and against patent infringement.

Extended Warranty®

The Westinghouse standard warranty covers a period of twelve months from date of shipment. When purchaser's specification calls for a longer period, this warranty may be extended at a price addition of 1% of the transformer net price for a two year warranty or an addition of 3% of the transformer net price for a three year warranty, pro-rated for partial years. It is Westinghouse policy not to extend the warranty period on this product beyond 36 months.

This warranty is in lieu of all warranties of merchantability, fitness for purpose or other warranties, express or implied, except of title and against patent infringement.

For example, when there are requests for extended warranty and for special warranty liability to cover "out and in" costs, the percent of net price addition will be:

Warranty Period in Years	Extended Warranty Period Adder - % of Net	Special Warranty Liability Adder - % of Net	Total Adder - % of Net
1	0	2	2
1½	¾	2	2¾
2	1	2	3
2½	1½	2	3½
3	2	2	4

Limitation of Liability

Westinghouse shall not be liable in contract or in tort for special, indirect, incidental or consequential damages, such as, but not limited to, loss of profits or revenue, loss of use of power system, cost of capital, cost of purchased or replacement power, or claims of customers of purchaser for service interruptions. The remedies of the purchaser set forth herein are exclusive, and the liability of Westinghouse with respect to any contract, or anything done in connection therewith such as the performance or breach thereof, or from the manufacture, sale, delivery, resale, installation or technical direction of installation, repair or use of any equipment covered by or furnished under this contract whether in contract, tort or otherwise, shall not exceed the price of the equipment or part on which such liability is based.

Patents

Subject to the following provisions, Westinghouse shall at its own expense, defend or at its option settle any claim, suit or proceeding brought against the Purchaser and/or its vendees, mediate and immune so far as based on an allegation that goods, material, equipment, device or (hereinafter referred to as product) or part thereof furnished hereunder constitute a direct or a contributory infringement.