

Initial Response to Comments

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Contents

| | |
|---|----|
| Advocates letter of support for the TV standards.pdf..... | 4 |
| CEA comments to CEC 11-2-09.pdf..... | 4 |
| Paul Wazzan Study (LECG REPORT) | 5 |
| Fraunhofer Report | 7 |
| CEA Comment Conclusions | 8 |
| California Utilities Joint Support Letter for TV Standards.pdf | 9 |
| TN 53260 09-18-09 CEC Response to Complaint Form from R. Girling.pdf..... | 9 |
| TN 53261 09-21-09 Public Comments Regarding Big Brother on Little TVs.pdf..... | 9 |
| TN 53267 09-18-09 CEC Response to Compliant Form from D. Provenghi.pdf..... | 10 |
| TN 53602 10-09-09 Letter of Support for CEC Energy Efficiency Standards for New TVs Sold in California.pdf..... | 10 |
| TN 53638 10-09-09 Broader Input from the LCD TV Association Enviornmental Subcommittee on Energy Efficiency in TVs.pdf..... | 10 |
| TN 53675 10-13-09 Updated Joint Utility Support Letter for the Proposed TV Standards.pdf..... | 10 |
| TN 53682 10-13-09 October 13, 2009 TV Hearing –Staff Presentation.pdf | 11 |
| TN 53702 08-20-09 CH2MHILL Report RE the Imagine Design Technology Manufacturing Comparison Consulting Project.pdf | 11 |
| TN 53704 10-13-09 Powerpoint Presentation on Digital Ambient Light Sensing for FPD Televisions.pdf . | 11 |
| TN 53705 10-15-09 Imagine Design Inc. Analysis.pdf..... | 11 |
| TN 53712 10-13-09 Cost of Efficiency Presentation From C. Cobb to CEC Staff.pdf | 11 |
| TN 53713 10-13-09 3M Optical Comments-Presentation Regarding TV Efficiency.pdf | 12 |
| TN 53714 10-13-09 Comments from California Utilites Regarding Proposed Television Efficiency.pdf [sic] | 12 |
| TN 53715 10-14-09 J. Howe Public Comments Regardging Proposed TV Efficiency Standards.pdf | 12 |
| TN 53724 10-22-09 D. Jordan Public Comments Regarding TV Regulations.pdf..... | 12 |
| TN 53725 10-22-09 A. Acheson Public Comments Regarding Support of Proposed Standards.pdf - Adobe Acrobat Standard.pdf..... | 13 |
| TN 53726 10-22-09 J. Louie Public Comments Regarding Support of TV Regulations.pdf..... | 13 |
| TN 53739 10-22-09 Public Comments from Mike Katz-Lacabe RE Reducing Power Consumtions of Televisions.pdf | 13 |

Initial Response to Comments

| | |
|---|----|
| TN 53740 10-22-09 Public Comments from Linda Ferzoco RE Reducing Power Consumptions of Televisions.pdf | 13 |
| TN 53741 10-22-09 Public Comments from Don Dinelli RE Reducing Power Consumptions of Televisions.pdf | 14 |
| TN 53742 10-22-09 Public Comments on Proposed Project.pdf | 14 |
| TN 53743 10-22-09 G. Wong Comments on TV Efficiency.pdf | 14 |
| TN 53744 10-22-09 C. Crisman Comments Regarding TV Efficiency.pdf | 14 |
| TN 53745 10-16-09 P. Wazzan Comments Related to Mathematical Error at the Public Hearing.pdf | 14 |
| TN 53750 10-23-09 HDI Ltd., High-Def 3D Technology Talking Points.pdf | 15 |
| TN 53752 10-23-09 Public Comments from Bobby Singh RE Reducing Power Consumptions of Televisions.pdf | 15 |
| TN 53768 10-24-09 P Stefan Comments.pdf | 15 |
| TN 53838 10-21-09 Comments from Consumer Electronics RetailerCoalition and California Retailers Association Regarding Proposed Rulemaking on Television Efficiency Standards.pdf..... | 15 |
| TN 53859 10-29-09 K. Wilson Public Comments Regarding TV Proposal.pdf..... | 16 |
| TN 53871 10-29-09 E-mail Letter RE Opposition to the Proposed TV Energy Efficiency Standard.pdf | 17 |
| TN 53883 10-21-09 Position of LCD TV Manufactures RE the CECs Proposal.pdf | 17 |
| TN 53898 11-02-09 NRDC Comments on the CECs 45-Day Language on TV Energy Efficiency Standards.pdf..... | 17 |
| TN 53899 10-30-09 Panasonics Preliminary Comments.pdf | 17 |
| TN 53902 10-30-09 T. Morton Public Comments Regarding Proposal to Regulate TV Electricity Usage.pdf | 18 |
| TN 53903 10-30-09 L. SooHoo Public Comments Regarding Proposal to Regulate TV Electricity Usage.pdf | 18 |
| TN 53904 11-01-09 G. Van Zuiden for cyberManor, Inc. Comments Regarding Proposal to Regulate TV Electricity Usage.pdf | 19 |
| TN 53905 11-01-09 E-mail Comments from Christine Hertzog Smart Grid Energy.pdf | 19 |
| TN 53906 10-31-09 E. Leicht Public Comments Regarding Proposal to Regulate TV Electricity Usage.pdf | 19 |
| TN 53907 11-2-09 Discussion of Cost Effectiveness Calculations 1.pdf | 20 |
| TN 53909 10-30-09 SHARP Comments on Notice of Proposed Action.pdf | 20 |
| TN 53910 10-30-09 Comments of Philips Electronic Regarding Proposed TV 1.pdf | 21 |
| TN 53912 10-21-09 R. Newll Comments to the Proposed Television Efficiency Standards.pdf..... | 22 |
| TN 53913 11-2-09 Comments from Andrews Electronics Gerry Demple.pdf..... | 22 |

Initial Response to Comments

| | |
|---|----|
| TN 53914 11-2-09 History of Energy Commission Staff and Consumer Electronic Associates Contacts regarding Proposed Television Efficiency Standards.pdf..... | 22 |
| TN 53915 11-2-09 E-mail Comments Proposal to regulate TV Electricity- Docket-09-AAER-1C.pdf..... | 23 |
| TN 53917 11-2-09 E-Mail Comments from TAC Inc. regarding Proposal to Regulate Television Electricity.pdf | 23 |
| TN 53920 11-2-09 JVC AmeriCorps Comments.pdf | 23 |
| TN 53921 11-2-09 Plasma Display Coalitions Comments on Proposed Regulation.pdf | 23 |
| TN 53922 11-2-09 E-Mail Comments from John Turner regarding 09-AAER-1C.pdf..... | 24 |
| TN 53933 11-2-09 HDILtd EnergyEffcntTVReport.pdf | 24 |
| TN 53934 11-2-09 Public Coments from Union of Concerned Scientists.pdf..... | 24 |
| TN 53936 11-2-09 NRDC Comments on the California Energy Commission’s.pdf | 24 |
| TN 53937- 11-2-09 CEDIAs Comments on Proposed television Energy Efficiency Standards.pdf..... | 25 |
| TN 53938 10-28-09 Public Comments of C Sayles Regarding TV Energy Efficiency.pdf | 25 |
| TN 53939 11-2-09 Sony Electronics Inc Comments.pdf..... | 25 |
| TN 53940 11-2-09 Comments from Digital Entertainment Group.pdf | 27 |
| TN 53943 11-02-09 Best Buy Supplemental Comments on CECs Proposed Rulemaking 1.pdf..... | 27 |
| TN 53944 11-02-09 CEA Comments Regarding Draft 45-Day Language on Appliance Efficiency Standards for TV.pdf | 28 |
| TN 53946 10-14-09 LCD Power Efficiency Technology Presentation.pdf | 28 |
| TN 53948 11-02-09 3M Comments Pertaining to Appliance Efficiency Regulations.pdf | 28 |
| TN 53963 10-02-09 P. Fannon for Panasonic Comments on TV Proposed Regulations.pdf | 28 |

Initial Response to Comments

Advocates letter of support for the TV standards.pdf

This letter suggests that the California Energy Commission (hereafter, “Commission” or “CEC”) adopt the 45-day language and does not suggest any changes.

CEA comments to CEC 11-2-09.pdf

The Consumer Electronics Association (“CEA”) asserts several points in its comments, which are addressed below, and in further detail elsewhere.

Point I: suggests that data and analysis by the Pacific Gas and Electric Company (“PG&E”) and Commission is flawed on the grounds they cite old data and fundamental math errors detailed in Paul Wazzan’s LECG report.

Response: The Commission has been sensitive to CEA’s desire to use more recent data and has asked CEA to provide such data as the CEA is a representative trade association for the television industry. Relying on 2007 data to make proposals and perform analysis in early 2008 is very reasonable. There are no errors in the analysis, and the LECG report has not shown any math errors in either the Commission or PG&E analysis. It does show a difference in assumptions. The rationale for using the assumptions made rather than the CEA assumptions will be addressed in response to the LECG report.

Point II: suggests that regulations will reduce or halt innovation in televisions.

Response: The Commission has identified the most obvious technological innovations in the near future: internet capability, 3-dimensional television images, organic light emitting diode (“OLED”), I-POD and other external device connectivity, etc. It is possible to meet the 2011 and 2013 “on” mode standards incorporating all of these features/ technologies, and the record shows many televisions have already done so in 2008 and 2009. The Commission is proposing minimal standards which are far from the maximum efficiency available from technologies already developed. Television industry representatives claim year-over-year efficiency improvements of up to 20%. This is not due to the invention of new technologies, but rather due to the incorporation of older technologies and simple design principles.

The regulations would only theoretically limit innovations if they required significantly more energy than televisions require currently. Sound engineering design considers a feature with a goal and constraints. In the past efficiency and power consumption were not hard-constraints and therefore features may have used a great deal more energy in televisions than necessary. However, when observing other consumer electronics which have hard-constraints on power, such as portable electronics, these

Initial Response to Comments

limitations have not stifled the steady pace of innovation. The Commission expects that televisions would follow the same path of efficient innovation as these portable consumer electronics.

Point III: suggests that CEA has proposals that save greater amounts of energy while being less burdensome to business.

Response: One of the criteria for adopting regulation is to demonstrate that all alternatives have been assessed and found to be less effective or more burdensome. CEA proposes a purportedly more effective and less burdensome proposal. The savings claimed are founded on the “Fraunhofer report.”

For numerous reasons explained in detail elsewhere, the Fraunhofer report does not demonstrate energy savings would be greater than anticipated by the proposed 45 day language. Therefore the alternative proposal is less effective than the express terms, and is rejected on that basis. In addition, the report has not demonstrated cost effectiveness, which is one of the fundamental policy and statutory cornerstones of the appliance efficiency program.

Point IV: Power factor and labeling proposed regulations do not meet the criteria of the Warren-Alquist Act.

Response: Power factor analysis has shown that for TVs that draw 100W or more the measure is cost effective. This conclusion is based on the PG&E paper submitted by Dr. Paul Bendt and which is cited by the staff report. The CEA comments offer no reason to reject the analysis of power factor cost, savings, and feasibility.

Labeling is a cost effective way to educate consumers. The cost of printing power consumption on sales material is low compared to the benefits of energy savings. Televisions are used an estimated average of 1,907 hours per year. This means that for every 1 watt of power reduction approximately 2 kWh/year are saved. The net present value of saving 1 kWh/year for 10 years at a 3% discount, which is related to the appreciation in energy costs, and at \$0.14/kWh, is \$1.24. Therefore reducing consumption by 1 watt has a value to the consumer of \$2.48. If labeling for televisions costs \$0.25 per unit, as an example, then the educational and competitive effect of publicizing energy consumption would only need to reduce the average power consumption of televisions in California by roughly one tenth of a watt to be cost effective. CEA has not demonstrated this effort is not cost effective.

Paul Wazzan Study (LECG REPORT): attempts to show that the proposed regulations do not meet Public Resources Code (aka Warren Alquist Act) because they are not cost effective.

Response:

Math Error

Initial Response to Comments

The study claims that a mathematical error reduces the claimed \$8.1 billion in value related to on mode power savings to \$3.4 billion. The LECG report incorrectly interpreted the Commission's assumptions. The calculation of the value accumulated by the year 2023 from converting a base-case television to tier 1 and tier 2 compliance was done without mathematical error, as explained more fully in the Staff Report. If the savings are estimated to peak at 6,515 GWh/year, the net present value (NPV) of such a conversion at \$0.14 per kWh for 10 years with a 3% discount is \$8.1 billion.

Discount Rate

The study then suggests that the Commission's discount rate is used to calculate NPV is not a reasonable figure. The LECG report suggests 10% is a better estimator of NPV to California Consumers. The LECG analysis does not include inflation rates or utility rate trends in relation to inflation. The Commission's 3% discount rate is based on cost of capital relative to mortgage rates and using inflation and tax rate information. Consumers will invest in televisions using a wide range of debt and equity funding mechanisms. In addition many people pay off debt investments over a shorter period of time than the life of the television. In fact many consumer electronics financing plans give interest free periods of 1 year to 3 years. Some consumers will purchase televisions with cash.

The authors of this report themselves have called the Commission's discount rate reasonable in a report published in March of 2009 and released to press, the Commission, the California Governor's Office etc. In addition a growing portion of the customers of televisions are commercial and have a cheaper cost of capital than general consumers. (See also See docket item TN53907.)

Industry efficiency trend

The LECG report then further discounts the regulation's savings by factoring in industry's trend toward efficiency. Voluntary standards are irrelevant because they are just that: voluntary. The mandatory standards are necessary to ensure the energy, cost, and greenhouse gas emission reductions which the Commission is legally obligated to pursue are permanently and enforcedly achieved.

Decreased Competition

LECG suggests that the regulations will lead to a decrease in competition by removing television models from the market. There is no evidence in the record that manufacturers will be unable to expand and differentiate within the energy efficient television market, or that the regulations will suppress competitive market pressures. This is especially true in a market where efficiency is currently essentially hidden from the consumers. In a pre-EnergyStar 3.0 world, there were no clear indications of efficiency for consumers to make decisions from. In a post-EnergyStar 3.0 world, EnergyStar 3.0 is so prevalent that consumers still lack an efficiency indicator. Therefore energy efficiency has been an invisible feature to consumers and has not put serious competitive pressure on price. The Commission will introduce this pressure through labeling which will increase if not maintain the same level of competition as a pre-regulatory market.

Cost of Compliance

Initial Response to Comments

The LECG report questions the Commission's conclusion that the incremental cost of compliance is zero. It claims that under such a situation manufacturers would become more efficient. The same LECG report claims that manufacturers are going to become more efficient. The market trends suggested by LECG therefore support a zero incremental cost. The LECG report also claims that the Commission ignored stakeholder comments related to incremental cost.

The Commission has identified several cost-neutral pathways to compliance for manufacturers. Given these cost neutral pathways, the incremental cost of regulation is also zero. Moreover, the Commission has identified a baseline unit energy savings of approximately \$250 with which to absorb costs.

Conclusion

The LECG report concludes that the Commission has not demonstrated cost neutrality to consumers. Commission staff disagrees. The reason and rationale behind staff's conclusions are outlined in the Commission's staff report on televisions.

Fraunhofer Report

The purpose of this report is to quantify energy savings related to ENERGY STAR and to CEA's proposed alternative programs for energy savings.

Response:

The Commission notes that despite CEA's assertions that the PG&E CASE and Commission TV Staff report use old data and poor assumptions, the Fraunhofer report procured by CEA uses the same figures and data to ascertain its savings. The Commission also notes that CEA did not have the Fraunhofer report estimate the savings from the proposed standard to compare with other measures.

Energy Star 3.0 and 4.0 savings

The report estimates energy star savings of 11,100 GWh related to ENERGY STAR 3.0 and an additional 17,600 GWh from ENERGY STAR 4.0. It is important to note that the ENERGY STAR 4.0 level leaves 33% of savings untouched. In other words, the Commission proposal would gain the remaining 33% of savings. This amounts to 33% of 17,600 or 5,886 GWh, a figure in the ballpark of PG&E estimates of energy savings. It is important to note that the savings from regulation are in addition to ENERGY STAR, and not instead of ENERGY STAR.

Auto Powerdown

This alternative proposal lacks feasibility. The proposal has two suggested methods of implementation: by sensing user input, and by occupancy sensor. One cannot implement this using user input because frequently user input is not to the TV itself but to external devices such as game consoles or set top boxes. In addition occupancy sensors have line of sight issues, especially where the sensors have to be placed in sub-optimal conditions such as at the height of a television. While Sony and other

Initial Response to Comments

manufacturers have begun to implement these features they are shipped disabled due to concerns over customer satisfaction. This feature is better addressed in peripheral devices rather than the television itself. Further, if voluntarily implemented in addition to the regulations, the savings estimated from this proposal is 145-190 GWh/year according to the report and these savings would be additive to the proposed standards.

Forced Menu Functionality

This portion of the Fraunhofer report analyzes potential savings of requiring all televisions to have a forced menu. The Commission's proposal for energy consumption utilizes a performance standard which recognizes the energy savings associated with using a default rather than retail mode. The Commission gives preference to performance standards over prescriptive standards. Forced menu is one of several options manufacturers can utilize to meet the standards. Manufacturers will be incentivized to use forced menu as it lowers the power consumption reported and labeled per requirements outlined in the standards.

Advertising Campaign

This portion of the Fraunhofer report analyzes potential savings of a statewide advertising campaign to ask consumers to lower the brightness/contrast settings of their televisions. The Fraunhofer report estimates the actual effectiveness of this program to be very low. It is also important to note that the existing stock in service that could benefit from this campaign is on average already 50% through its design life. This means that on average, savings for these televisions would only occur for an estimated 5 years rather than the 10 years used for the proposed standards. The impact of this on the cost effectiveness of this proposal is not addressed. Further, any savings addressed would be additive and not in place of that achieved by the proposed standards.

DTV Acceleration Program

This portion of the Fraunhofer report analyzes potential savings of a statewide DTV acceleration program. This is estimated to be 10 GWh/year. In addition these savings per TV are not over a 10 year design life as TV replacement will happen naturally anyway and this proposal only aims to accelerate the replacement. The cost effectiveness of this proposal is not addressed, and requires the state to pay \$50 rebates per television. The cost to implement such a program is in the millions, the energy savings do not outweigh these costs, and the program therefore does not meet the requirements in the Public Resources Code.

Conclusion

The conclusion of the Fraunhofer report reviews the energy saving programs analyzed in the report.

CEA Comment Conclusions

The CEA comments conclude that the standards are not cost effective and that there exists a set of alternative proposals which exceed the energy savings estimated by the Commission.

Initial Response to Comments

Response: The proposed regulations are cost effective because of the conclusions of the Commission's Television Staff Report and the fact that there are no math errors, the assumption of a 3% discount rate is reasonable, and that the cost effectiveness is on a per unit basis. The alternative proposals do not provide a more effective and less burdensome regulation and many of the alternate proposals do not meet the Public Resources Code (Warren-Alquist Act) requirements.

California Utilities Joint Support Letter for TV Standards.pdf

This letter supports the proposed regulation, no changes to be considered.

TN 53260 09-18-09 CEC Response to Complaint Form from R. Girling.pdf

This document contains a complaint from R. Girling against the policy decision of the Energy Commission to adopt appliance efficiency for televisions.

Response: No changes to be considered. This comment also includes a response by Commission media office to explain the goals and purposes of efficiency standards.

TN 53261 09-21-09 Public Comments Regarding Big Brother on Little TVs.pdf

This comment, submitted by Bob Elsner, suggests that the proposed adoption will negatively affect the California Economy.

Response: The commenter is incorrect in assuming that the regulations will ban high definition and larger screen televisions from the state. The Commission has identified hundreds of models across all screen sizes that meet the proposed on mode power consumption standards well in advance of implementation. The negative economic impact suggested in this comment are mitigated by the availability, technical feasibility, and cost effectiveness of the standards.

Initial Response to Comments

TN 53267 09-18-09 CEC Response to Compliant Form from D. Provenghi.pdf

This comment, submitted by David Provenghi, expresses concern about incremental price of televisions due to the proposed standards.

Response: The commission has demonstrated cost effectiveness in its analysis. The proposed regulations satisfy the Public Resources Code (Warren-Alquist Act).

TN 53602 10-09-09 Letter of Support for CEC Energy Efficiency Standards for New TVs Sold in California.pdf

This letter supports the proposed regulation, no changes to be considered.

TN 53638 10-09-09 Broader Input from the LCD TV Association Environmental Subcommittee on Energy Efficiency in TVs.pdf

This comment, submitted by the LCD TV association, states that the proposed regulations are feasible and would result in little incremental cost. In addition it expresses concern over the regulation's impact on new features such as internet connectivity, teleconference ability, 3D TV, and gesture recognition.

Response: The Commission has addressed this issue in its TV Staff Report and believes the regulations will not limit the incorporation of these technologies due to the test methodology and future efficiency improvements.

TN 53675 10-13-09 Updated Joint Utility Support Letter for the Proposed TV Standards.pdf

This letter supports the proposed regulation, no changes to be considered.

Initial Response to Comments

TN 53682 10-13-09 October 13, 2009 TV Hearing –Staff Presentation.pdf

This document is not a comment letter, but is a copy of the Commission’s presentation at the October 13, 2009 hearing on 45 day language.

TN 53702 08-20-09 CH2MHILL Report RE the Imagine Design Technology Manufacturing Comparison Consulting Project.pdf

This document was submitted by Imagine Design Inc to substantiate the technical claims of their comments

TN 53704 10-13-09 Powerpoint Presentation on Digital Ambient Light Sensing for FPD Televisions.pdf

This PowerPoint presentation from TAOS explains a technology that can be used to meet the proposed standard. It claims neither support nor requests changes to the 45 day language.

TN 53705 10-15-09 Imagine Design Inc. Analysis.pdf

This document was submitted by Imagine Design Inc to substantiate the manufacturability of the technology described in their comments to the Commission.

TN 53712 10-13-09 Cost of Efficiency Presentation From C. Cobb to CEC Staff.pdf

Initial Response to Comments

This comment was submitted by the McLaughlin Group and supports the analysis and assertions of the Commission Staff report regarding technical feasibility and cost effectiveness.

TN 53713 10-13-09 3M Optical Comments-Presentation Regarding TV Efficiency.pdf

The Comments submitted by 3M point to feasibility and cost effectiveness of our standards. This supports our standards and does not suggest changes to 45 day language.

TN 53714 10-13-09 Comments from California Utilites Regarding Proposed Television Efficency.pdf [sic]

This letter supports the proposed regulation, no changes to be considered.

TN 53715 10-14-09 J. Howe Public Comments Regarding Proposed TV Efficiency Standards.pdf

This comment was submitted by Jeanette Howe of Specialty Electronics. The comment questions the necessity of the proposed standards and effectiveness due to out of state sales. The TV Staff Report and PGE CASE report show significant energy savings by proposing the regulations. Despite industry efficiency advances there remain many televisions which do not meet the proposed standards. Therefore the proposal will improve energy efficiency beyond the efforts of an unregulated market. Out of state and online sales of other appliances have not been problematic for California as a result of other regulations.

TN 53724 10-22-09 D. Jordan Public Comments Regarding TV Regulations.pdf

Initial Response to Comments

This comment was submitted by Donald Jordan. His concern is that overregulation is destroying business in CA and asks the CEC to not regulate TVs. The CEC has shown the regulations are cost effective and therefore cause economic benefit to the State and its power distribution and generation systems.

TN 53725 10-22-09 A. Acheson Public Comments Regarding Support of Proposed Standards.pdf - Adobe Acrobat Standard.pdf

This comment supports the proposed regulation, no changes to be considered.

TN 53726 10-22-09 J. Louie Public Comments Regarding Support of TV Regulations.pdf

This comment supports the proposed regulation, no changes to be considered

TN 53739 10-22-09 Public Comments from Mike Katz-Lacabe RE Reducing Power Consumptions of Televisions.pdf

This comment supports the proposed regulation, no changes to be considered

TN 53740 10-22-09 Public Comments from Linda Ferzoco RE Reducing Power Consumptions of Televisions.pdf

This comment supports the proposed regulation, no changes to be considered.

Initial Response to Comments

TN 53741 10-22-09 Public Comments from Don Dinelli RE Reducing Power Consumptions of Televisions.pdf

This comment supports the proposed regulation, no changes to be considered

TN 53742 10-22-09 Public Comments on Proposed Project.pdf

This commenter requests that the CEC stay out of their life. This is out of the scope of the 45 day language.

TN 53743 10-22-09 G. Wong Comments on TV Efficiency.pdf

This comment supports the proposed regulation, no changes to be considered. The comment also recommends labeling options which are the same in nature with what the Commission has proposed. No specific language changes or additions are mentioned and therefore the current proposed labels were considered to be sufficient.

TN 53744 10-22-09 C. Crisman Comments Regarding TV Efficiency.pdf

This comment asks the Commission to consider regulations for set top boxes. This is outside of the scope of this rulemaking.

TN 53745 10-16-09 P. Wazzan Comments Related to Mathematical Error at the Public Hearing.pdf

This document is not a public comment for 45 day language, but is docketed to document CEC efforts to substantiate claims made by commenters during the October 13, 2009 public hearing.

Initial Response to Comments

TN 53750 10-23-09 HDI Ltd., High-Def 3D Technology Talking Points.pdf

This comment, submitted by HDI Ltd, discusses a future television display technology that will not be hindered by the proposed standards, and in fact would easily meet the standards.

TN 53752 10-23-09 Public Comments from Bobby Singh RE Reducing Power Consumptions of Televisions.pdf

This comment supports the proposed regulation, no changes to be considered.

TN 53768 10-24-09 P Stefan Comments.pdf

This comment supports the proposed regulation, no changes to be considered.

TN 53838 10-21-09 Comments from Consumer Electronics RetailerCoalition and California Retailers Association Regarding Proposed Rulemaking on Television Efficiency Standards.pdf

This comment was submitted by the Consumer Electronics Retailers Association and the California Retailers Association. The comment is primarily concerned with loss of sales to retailers due to: internet sales, interstate sales, and elimination of highly featured televisions. The Commission's TV Staff Report finds that the proposed standards will not affect the ability to provide features to consumers due to the nature of the test procedure and the fact that many highly featured televisions exist today which meet the on mode standards. The standards are not estimated to impact current internet and out of state sales because the models which currently meet the proposed standards are competitive and are not inferior to inefficient televisions.

Initial Response to Comments

The comment letter also claims the CEC analysis of proposed regulations will dampen energy savings from product integration. Staff conclude that product integration will not be hampered from proposed standards as these additional features may be turned off during the test procedure.

In addition the comment letter claims that the proposal will interfere with voluntary efforts and degrade the ENERGY STAR brand. At no time is the Energy Commission requiring ENERGY STAR labels on televisions sold in California. Energy Star will therefore remain a brand identifier of the more efficient televisions on the market, and will not be degraded. ENERGY STAR and the proposed standards are complimentary not duplicative efforts to reduce energy consumption.

The comment letter makes several recommendations for Energy Commission action. In summary they request the Energy Commission to rely on federal programs: US DOE appliance standards, US EPA ENERGY STAR, and the FTC to accomplish the goals of the proposed regulations. The Energy Commission supports national standards and will conform to those standards where they overlap in the future with the proposed standards.

The comment letter recommends that the Energy Commission encourage the use of smart power strips, require utilities to adopt smart-grid technologies, incentivize ENERGY STAR through tax and energy rate decreases, and require state procurement of efficient products with proper disposal of obsolete equipment. All of these recommendations are highly out of the scope of the rulemaking.

The comment letter also recommends that the Commission alter its proposed effective dates for standards to July. Staff recommends that this proposed change be rejected as feasibility has been demonstrated for these dates.

The comment letter also expresses concern about non-compliant televisions in stock after the implementation dates of the standards. The Energy Commission regulates appliances by manufacture date, therefore existing store stock manufactured pre-implementation is not affected by appliance standards.

TN 53859 10-29-09 K. Wilson Public Comments Regarding TV Proposal.pdf

This comment, submitted by Keith Wilson, suggests that the proposed standards are absurd and should not be considered. The proposed standards are based on research, data, and other evidence which demonstrate cost effectiveness, feasibility, and energy savings. The conclusions are rational and explained in detail in CEC's TV Staff Report.

Initial Response to Comments

TN 53871 10-29-09 E-mail Letter RE Opposition to the Proposed TV Energy Efficiency Standard.pdf

This comment, submitted by Morgan Harman of The Tech Source, expresses general opposition and questions the timing of adopting TV regulations. While the global economy may not be in the most desirable state, the timing is right for television regulations. These regulations will determine minimum efficiency requirements on the tail end of the digital transformation and just as the CRT stock is due to expire. The NOPA and TV Staff Report do not identify negative impacts to the economy and in fact identify positive impacts.

TN 53883 10-21-09 Position of LCD TV Manufacturers RE the CECs Proposal.pdf

This letter was jointly submitted by television manufacturers JVC, Sony, P & F USA, Panasonic, Sanyo, Toshiba, Sharp, and LG to clarify that they have different views than those put forth by the “LCD TV Association.” The clarification includes the fact that they oppose the proposed standards and believe that they are a threat to technology innovations. The CEC has addressed the threat to technology innovation in its TV Staff Report and concludes that due to the test methodology and efficiency improvements such an effect will not exist.

TN 53898 11-02-09 NRDC Comments on the CECs 45-Day Language on TV Energy Efficiency Standards.pdf

This comment supports the proposed regulation, no changes to be considered. The comment also suggests that large screen televisions should be regulated through a subsequent rulemaking.

TN 53899 10-30-09 Panasonics Preliminary Comments.pdf

This comment, submitted by Panasonic, requests several technical changes to the proposed 45 day language.

Initial Response to Comments

The first suggestion is that the power factor testing be done with a static pattern rather than during the dynamic test mode. The Commission staff suggests rejection of this proposed change because measuring during the dynamic test mode results in power factor measurements made in conditions which better represent real world use.

The second suggestion is that the regulation include language that specifies that the home mode settings be used to determine compliance with the on-mode regulations. Commission staff suggests rejection of this proposed change because it is already clear that the on mode power regulations are related to the home mode.

The third suggestion is that the regulation add notes to the luminance testing. Staff recommends the rejection of this change as it the Commission looks to harmonize with ENERGY STAR testing procedures. The proposed luminance test method is a copy of the published ENERGY STAR language. This language was developed through review of the ENERGY STAR stakeholders. When ENERGY STAR revises this language the Energy Commission can revise its test method.

The fourth suggestion is to fix numbering typos in section 1605.3(V)(3) of the regulation. Staff recommends the Commission make these non-substantive changes.

TN 53902 10-30-09 T. Morton Public Comments Regarding Proposal to Regulate TV Electricity Usage.pdf

This comment was submitted by Terry Morton of Land & Sea Entertainment. The letter expresses concerns that the proposed regulations will drive consumers from their business to internet sales. The staff does not expect the regulations to result in a mass migration to internet purchases and therefore that Land & Sea Entertainment's estimation of damages will not occur. In addition Land & Sea Entertainment has not evaluated the benefits of the 6515 GWh/year energy savings in counterpoint to its negative analysis.

TN 53903 10-30-09 L. SooHoo Public Comments Regarding Proposal to Regulate TV Electricity Usage.pdf

This comment was submitted by Leon SoHoo of Paradyme Sound & Vision. The letter opposes the proposed regulations and claims that it will cause economic damage to Paradyme Sound & Vision as well as California in general. Staff estimates the impact to California to be positive with a maximum savings

Initial Response to Comments

of over \$900 million per year statewide. In addition staff does not expect a migration to out of state and internet sales as compliant televisions are competitive with non-compliant televisions.

TN 53904 11-01-09 G. Van Zuiden for cyberManor, Inc. Comments Regarding Proposal to Regulate TV Electricity Usage.pdf

This comment was submitted by Gordon Van Zuiden of Cybermanor, Inc. The comment opposes the regulations citing economic damages from a CEA commissioned economic study published March 23, 2009. The Commission's TV Staff Report addresses this analysis and why staff believes the standards will not result in a loss of jobs and revenue. Cybermanor, Inc. seems to be confused about the proposed regulation as it cites it will ban "100% of plasma televisions over 60 inches." The proposed regulations do not cover these products, and staff has demonstrated compliant products in all size categories within the scope of the rulemaking.

TN 53905 11-01-09 E-mail Comments from Christine Hertzog Smart Grid Energy.pdf

This comment supports the proposed regulation, no changes to be considered

TN 53906 10-31-09 E. Leicht Public Comments Regarding Proposal to Regulate TV Electricity Usage.pdf

This comment was submitted by Eric Leicht of AV Partners, Inc. This comment suggests that the Commission's proposed regulations are likely to be obsolete because the fast moving industry would produce compliant televisions anyhow. The power consumption data that exists still shows many televisions still fail to meet even the minimal 2011 standards through the over the time span of 2007-2009. Current trends do not suggest that the market would meet the efficiency levels in the proposed regulations without mandatory standards.

The comment letter also suggests that the proposed regulations will cause thousands of job losses and decreased tax revenue. This is directly contradictory to the first statement which is that the regulations will not have an affect on the television market. This claim of economic damage is not substantiated but most likely stems from the CEA commissioned economic report. The TV Staff Report addresses these concerns.

Initial Response to Comments

The comment letter suggests that consumers will turn from LCD and Plasma purchases to projection TVs which “consume more power.” Projection TVs are not exempt from regulation, and if LCD and Plasma televisions consume less energy than a compliant Projection TV they will meet the proposed on mode standards. The commenter is confused about the scope of standards, which cover all television technologies.

TN 53907 11-2-09 Discussion of Cost Effectiveness Calculations 1.pdf

This document is not actually a comment, but a document which outlines cost effectiveness calculations and assumptions used by the California Energy Commission in past rulemakings and determinations.

TN 53909 10-30-09 SHARP Comments on Notice of Proposed Action.pdf

This comment was submitted by Jon Fairhurst of Sharp Laboratories of America (Sharp). The comment letter expresses concern that the proposed regulations were not based upon any clear policy goals. Sharp suggests that this will cause long-term uncertainty which will lead to reduced investment and innovation. The Energy Commissions policy mirrors its statutory purpose which is to adopt efficiency standards which save energy, are cost effective, and technically feasible. PG&E submitted a proposal for regulations to the Commission which met this criteria, therefore the Commission has opened a rulemaking to adopt these standards. Technology companies have argued on the record that the proposed standards provide certainty in the minimum efficiency of future televisions. The reason that many technology companies have supported the regulation is that this demand for efficient technologies introduces a certainty in the need for their technologies which lead to increased investment and innovation.

Sharp expresses concern about the ability of hospitality and hotel televisions to meet the proposed standards. Staff has investigated this concern and has found that the changes required can be made in firmware and can be made without significant disruption of the services required in these commercial settings.

The Sharp comment letter addresses portions of the 45 day language in a numbered fashion mimicked here:

1. Sharp suggests the scope of the regulations is unclear as to whether commercial televisions are covered or not. In addition Sharp suggests that commercial television should not be covered. The 45 day language is clear in that it does not exempt or differentiate commercial televisions. Commercial televisions are therefore in the scope of the regulations and staff recommends to

Initial Response to Comments

keep them within the scope. Exempting commercial televisions results in forgone energy savings, enforcement loopholes as it is difficult to identify and define this category of television, and there is no evidence to substantiate such an action.

2. Sharp suggests that power factor regulations be dropped from the 45-day language. Sharp claims that the measure is not cost-effective. Staff relied on PGE analysis done by Dr. Paul Bendt which clearly demonstrates the advantages and cost-effectiveness of power factor correction in televisions. No comments have been received which refute this analysis. Staff therefore recommends keeping these requirements as they are cost-effective, save energy, and are feasible.
3. Sharp suggests that the Energy Commission drop luminance testing and requirements from the regulations to wait for international standards to be developed. Staff recommends that the Commission reject this proposal as it harmonizes with voluntary ENERGY STAR standards, mandatory Australian and European Union standards, and mitigates gaming opportunities for the standards.
4. Sharp suggests 1605.3(V)(3)(B) will not allow for data acquisition mode. This is an inaccurate interpretation of the regulation which requires televisions to “enter passive-standby mode” but not that they remain in that mode. In other words televisions may then transition to active-standby mode(s).
5. Sharp expresses concern related to hotel televisions and the requirements of 1605.3(V)(3)(B) For the same reason as above, staff believes the standards will not inhibit the manufacture of hotel televisions.
6. Sharp expresses concern over the size of the font required for television labels. The size of the font of the menu within the television’s menu can be implemented for power consumption labeling.
7. Sharp discusses issues related to the order of the manufacturer process. The comments assert that the labeling requirements will cause an increase in manufacturing preparation. Staff believes this issue to be minimal as manufacturers will not produce televisions that do not meet the standards and therefore can not begin manufacture until picture settings are finalized.
8. Sharp suggests it would be more appropriate to wait for FTC to add labeling requirements. Staff recommends adopting labeling requirements to begin educating consumers until FTC regulations become effective.
9. Sharp expresses concern over preemption issues between the CEC and FTC. This concern is not an issue because US FTC regulations will preempt CEC labels in entirety and there will never be multiple energy labeling regimes.

Initial Response to Comments

This comment was submitted by Ric Erdheim of Philips. The comments by Phillips express concerns over the impact of the proposed regulations on hotel/hospitality televisions. These concerns stem from a misinterpretation of the proposed standards and their interaction with Data Acquisition Mode (DAM). The proposed regulations do not limit the energy consumption of this mode, nor does it prohibit the use of DAM. Staff investigated the interaction of the regulation and hotel televisions and found that hotel televisions can feasibly meet standards by the implementation date without sacrificing DAM mode features.

TN 53912 10-21-09 R. Newll Comments to the Proposed Television Efficiency Standards.pdf

This comment was submitted by Robert Newell of Advocates for Responsible Energy Consumption. This comment expresses concerns over the regulations potential impact on television innovation. Staff has assessed impact on current television features and future features and technologies and has determined in the TV Staff Report that the regulations will not prohibit the introduction of these technologies.

TN 53913 11-2-09 Comments from Andrews Electronics Gerry Demple.pdf

This comment was submitted by Gerry Demple of Andrews Electronics. Andrews Electronics claims that the regulations will cause economic damage to lowered service and repair calls for televisions. The proposed regulations will have no affect on television repair and will not change the number or screen size of television stock and therefore the number of repairs should remain unchanged.

TN 53914 11-2-09 History of Energy Commission Staff and Consumer Electronic Associates Contacts regarding Proposed Television Efficiency Standards.pdf

This document is not a comment, but rather documentation of interactions between the CEC and CEA.

Initial Response to Comments

TN 53915 11-2-09 E-mail Comments Proposal to regulate TV Electricity-Docket-09-AAER-1C.pdf

This comment was submitted by Mike McMaster of Wilshire Home Entertainment. Wilshire Home Entertainment expresses concerns about economic impact of the proposed regulations similar to those already responded to in this document. CEC has evaluated the economic damages alleged in the CEA commissioned economic study, and has concluded in its TV staff report that the impacts will be positive to California's economy.

TN 53917 11-2-09 E-Mail Comments from TAC Inc. regarding Proposal to Regulate Television Electricity.pdf

This comment was submitted by Jerry Simmons of The Appropriate Connections. The Appropriate Connections expresses concerns about economic impact of the proposed regulations similar to those already responded to in this document from small retailers. CEC has evaluated the economic damages alleged in the CEA commissioned economic study and by small retailers, and has concluded in its TV staff report that the impacts will be positive to California's economy.

TN 53920 11-2-09 JVC AmeriCorps Comments.pdf

This comment was submitted by David Kline of JVC Americas Corp. (JVC). The majority of the comments made by JVC are related to a power point presentation given at the October 13, 2009 hearing by CEC staff. The corrections to the presentation suggested by JVC do not lead to suggested changes to the proposed 45-day language. The purpose of the segment of presentation that JVC has commented on was to demonstrate that televisions have and are manufactured that meet the on mode requirements in advance of the implementation dates which many JVC televisions have.

TN 53921 11-2-09 Plasma Display Coalitions Comments on Proposed Regulation.pdf

Initial Response to Comments

This comment letter was submitted by James Palumbo of the Plasma Display Coalition (PDC). The PDC claims that television regulations are unnecessary and based on old and flawed PG&E data. In addition the PDC refers to several alternative approaches. Please refer to the response to CEA's comments.

The PDC claims that the proposed regulations are based on a biased approach to regulation and are regulations for the sake of regulations. The proposed regulations are in fact based on the record. The regulations have been shown to meet the requirements outlined in the Public Resources Code (Warren-Alquist Act).

TN 53922 11-2-09 E-Mail Comments from John Turner regarding 09-AAER-1C.pdf

This comment was submitted by John turner. His comment expresses concern that television quality will suffer as a result of regulation. Television quality is not dictated by a set power consumption requirement. Technology allows televisions to be manufactured which create equivalent or superior picture quality while consuming less energy. Quality televisions exist today which meet the proposed on mode requirements.

TN 53933 11-2-09 HDILtd EnergyEffcntTVReport.pdf

This comment was submitted by Chris Buttner for HDI Ltd. This comment supports the proposed regulations and outlines various supporting facts, articles, and HDI Ltd's laser television technology which would according to comment exceed the proposed standards.

TN 53934 11-2-09 Public Coments from Union of Concerned Scientists.pdf

This comment supports the regulations, and provides counterpoints to CEA assertions and economic analysis.

TN 53936 11-2-09 NRDC Comments on the California Energy Commission's.pdf

Initial Response to Comments

This comment supports the regulations and provides comments related to product availability and incremental cost which further support the adoption of the proposed regulations.

TN 53937- 11-2-09 CEDIA's Comments on Proposed television Energy Efficiency Standards.pdf

This comment was submitted by Darren Reamen for CEDIA. CEDIA's comments urge the CEC to forgo mandatory standards. CEDIA claims that regulations will put its members at a competitive disadvantage to online and out of state television retailers. There will be and already many products available which CEDIA members will be able to sell which are of good quality and which meet the proposed standards. CEDIA customers are seeking television installation services which internet and out of state retailers can not provide.

TN 53938 10-28-09 Public Comments of C Sayles Regarding TV Energy Efficiency.pdf

This comment was submitted by Charles Sayles. Mr. Sayles suggests that the commission should allow the market to determine whether televisions should be efficient or inefficient rather than enact regulations. Mr. Sayles makes several other suggestions which are out of the scope of the rulemaking. Staff recommends that the CEC adopt regulations based on the rationale outlined in the TV Staff Report, NOPA, and ISOR.

TN 53939 11-2-09 Sony Electronics Inc Comments.pdf

This comment was submitted by Tim Brison for Sony Electronics Inc. Sony comments are organized subject:

Download Acquisition Mode – Sony has misinterpreted 1605.3 (V)(3)(B) that the commission does not allow for televisions to enter DAM mode. It only specifies that the television must enter passive-standby mode, not that it stay in that mode.

Luminance – Sony comments also demonstrate misinterpretation of regulations for luminance as well. The Sony comment suggests that the CEC is proposing to require that televisions be 65% of the full brightness of the television. This is inaccurate; the television is required to be 65% of the brightness of retail mode or vivid mode. This requirement is necessary in coordination with labeling requirements as

Initial Response to Comments

the temptation to lower brightness to compete on labeling will grow. If the settings are too dim users will adjust the brightness to meet their needs.

Power factor correction - Sony states that their televisions already meet the power factor requirements. They also state that power factor correction is not cost effective to consumers. The CEC relies on PGE analysis by Dr. Paul Bendt to demonstrate the cost effectiveness of power factor standards. This analysis has been publicly available since April 13, 2009. The commission has not received any information to refute the conclusions derived from that report.

Consumer cost - Sony points out in their comments the many ways in which a television manufacturer has to meet the proposed on-mode regulations. Sony also points out that some of these paths lead to high incremental cost to manufacturers and consumers. The TV Staff Report acknowledges this fact as well. While there are some expensive methods of improving efficiency, there are many neutral cost methods which require television redesign and technology implementation but lead to counterbalancing parts reductions. In this way the commission has identified cost effective methods to meet the proposed standards. However to allow for flexibility in manufacturing the CEC has proposed performance standards as opposed to requiring specific technology implementation.

Uniformity – Sony incorrectly evaluates uniformity issues between state and federal regulations. Ultimately federal regulations preempt state regulations. The two regimes do not compete. This goes for labeling and power consumption requirements both.

Labeling – Sony expresses concern that on mode power labels may be confused with the safety power rating labeling on electronic devices. The regulations provide leeway for manufacturers to adjust the descriptor of the power label to avoid confusion.

Special interest – Sony points out the motivation of technology companies to support television regulations.

CEC Staff presentation- Sony states that the design of their television does not allow for the disconnection of internet and ipod processing units because the features are incorporated in the same processor used for all television operation. This statement, even if true, avoids the fact that many Digital Signal Processing (DSP), filter, buffer, and amplifier circuits would not be utilized when these functions are not used. In addition processor power consumption scales by the number of operations conducted. The power consumption is caused by transitions from on and off states in transistors. These state changes are made during calculations and operations. Therefore when internet and ipod operations are not being made the processor consumes less power. The test method would not detect the total extra capacity used within these processors for the implementation of these features.

In addition Sony states that its design solution would be to incorporate these features into separate processors and then turn those processors off during testing. Ultimately using a more efficient processor would be a far cheaper and simple solution. Following Moore's law a processor with the same capabilities will use half the power by the time Tier 2 standards are effective.

Initial Response to Comments

Sony also points out that the television models described as “tier 2 compliant” in the CEC presentation were judged on compliance based solely on their ability to meet the on mode power standard. This is true, and the purpose of this demonstration was to show feasibility of the on mode power standard.

The remainder of Sony’s comments are summary with the addition that assertion that the implementation dates of the proposed standards do not provide enough time to design to compliance. The 2011 standards only require software changes to televisions and in some cases minor improvements in efficiency. The 2013 standards allow for two full design cycles from adoption to implementation. It is feasible for manufacturers to make televisions which meet standards in 2013 which over 300 television models meet today across all screen sizes.

TN 53940 11-2-09 Comments from Digital Entertainment Group.pdf

This comment was submitted by Amy Smith for The Digital Entertainment Group (DEG). DEG expresses concern over potential limitations of innovation and features in televisions due to the proposed regulations. The TV Staff Report addresses and discusses technology innovation in relation to the proposed regulations.

TN 53943 11-02-09 Best Buy Supplemental Comments on CECs Proposed Rulemaking 1.pdf

This comment was submitted by Laura Bishop for Best Buy. Best Buy makes two requests for regulatory change. The first request is that the CEC move tier 2 implementation dates to accommodate a US DOE appliance rulemaking on televisions. This would make tier 2 a placeholder in case DOE did not adopt standards. Staff recommends the Commission reject this suggestion as the timeframe for a DOE rulemaking which has not started and which has no clear schedule is impossible to anticipate. In addition delaying tier 2 unnecessarily causes a loss of energy savings to California consumers.

The second request is that the CEC require labeling at the point of manufacture and that those labels would have a sunset date for the implementation of national labeling requirements set forth by the FTC. Staff recommends the Commission reject these suggestions as television purchasing decisions are made at point of sale based on factors information beyond the control of manufacturers. Labeling sunset language is unnecessary as FTC will already preempt CEC proposed labeling regulations upon FTC implementation.

Initial Response to Comments

TN 53944 11-02-09 CEA Comments Regarding Draft 45-Day Language on Appliance Efficiency Standards for TV.pdf

This is a duplicate of the CEA comment already discussed (see second item in table of contents)

TN 53946 10-14-09 LCD Power Efficiency Technology Presentation.pdf

This document is a presentation of McLaughlin Group technology which improves the efficiency of televisions. The assertions made here are made to support the conclusions made in the TV Staff Report related to feasibility and cost-effectiveness.

TN 53948 11-02-09 3M Comments Pertaining to Appliance Efficiency Regulations.pdf

This comment from 3M expresses support for regulations and discusses 3M's television display film technology which can be implemented to improve television efficiency.

TN 53963 10-02-09 P. Fannon for Panasonic Comments on TV Proposed Regulations.pdf

This comment was submitted by Peter Fannon for Panasonic. The comments request the CEC drop power factor, luminance ratio, and requirements related to television design. Staff recommends that the proposed regulations include luminance ratio to maintain labeling integrity and prevent manipulation of performance to pass performance test requirements. Staff recommends including power factor requirements as they are cost-effective, feasible, and save energy as detailed in the TV Staff Report.

Panasonic suggests that FTC is a better venue to pursue labeling requirements. Staff recommends adopting labeling standards so that consumer education and information is available as soon as possible.

Panasonic conveyed disappointment that televisions were not included in the CEC's rebate program. This rebate program is restricted by the U.S. DOE and is part of federal stimulus funding. The rebate program is limited to white goods, and does not include the possibility to rebate consumer electronics.

Panasonic criticizes the incremental cost conclusions of the CEC. The assumptions are clear in the TV Staff Report and incremental cost conclusions were made upon the record before the CEC staff

Initial Response to Comments

Panasonic requests exemption, at least temporarily, for business/hotel/hospitality televisions for further investigation. Staff has already conducted investigation into these televisions and concluded that commercial and hospitality televisions are not inherently different than televisions intended for consumers, and special treatment is not warranted.